



## SEQUENCE LISTING

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McLAREN, MARGARET

<120> METHODS AND COMPOSITIONS FOR DETECTING AND TREATING RETINAL  
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 <211> 1026  
 <212> DNA  
 <213> Homo sapiens

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 <211> 757  
 <212> DNA  
 <213> Homo sapiens

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 <211> 2395  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 70

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 70

Met Ala Phe Leu Val His Ser Gln Pro Val Ile Leu Gly Phe Thr Val			
1	5	10	15

Leu Leu Ser Tyr Ile Leu Arg Tyr Gln Leu Leu Phe Phe Lys Phe Val		
20	25	30

Phe Ile Leu Phe Asp Lys Lys Pro Ala Leu Ala Thr His Thr His Asn		
35	40	45

Lys Ser His Phe Lys Ile Val Ala Gln Thr Pro Arg Lys Lys Arg Lys		
50	55	60

Glu Lys Leu Glu Gln Gln Gln Lys Asn		
65	70	

&lt;210&gt; 71

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 71

Met	Thr	Leu	Leu	Val	Phe	Thr	Ser	His	Val	Gln	Cys	Pro	Asn	Arg	Gln
1				5					10					15	

Cys	Lys	Lys	Tyr	Pro	Val	Trp	Phe	Asn	Arg	Lys	Ser	Val	Tyr	Val	Ser
					20			25				30			

Leu	Phe	Glu	Thr	Ser	Phe	Thr	Leu	Ser	Gly	Ser	Leu	Ser	Ser	Met	Lys
						35		40			45				

Ser	Ala	Arg	Asn	Ile	Gly	Trp									
					50			55							

&lt;210&gt; 72

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 72

Met	Glu	Thr	Asn	Phe	Val	Glu	Leu	Leu	Pro	Phe	Asp	Leu	Gly	Leu	Glu
1					5				10			15			

Tyr	Glu	Leu	Leu	Tyr	Asn	Ser	Tyr	Ser	Tyr	Leu	Ala	Asn	Ala	Gln	Phe
					20			25			30				

Ser	Ile	Thr	Ser	Leu	Met	Ala	Phe	Thr	Arg	Lys	Ala	Val	Leu	Glu	Ala
					35			40			45				

Ile	Val	Ile	His												
		50													

&lt;210&gt; 73

&lt;211&gt; 45

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 73

Met	Tyr	Phe	Ala	Met	Lys	Leu	Pro	Leu	Gly	Leu	Ile	Ile	Ser	Ile	Pro
1						5			10			15			

Leu	Leu	Arg	Asn	Val	Gln	Met	Ile	Leu	Tyr	Ser	Thr	Thr	Leu	Val	Pro
					20			25			30				

Leu	Cys	Met	Thr	Val	Arg	Phe	Phe	Phe	Phe	Leu	Leu	Phe			
					35			40			45				

&lt;210&gt; 74

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 74

Met Asp Arg Glu Asn Gln Ile Ser Ser Tyr Asn Cys Leu Ala Asn Gly  
1 5 10 15Ile Ser Gly Ser Phe Ser Ala Ser His Phe Arg Leu His Ser Leu Thr  
20 25 30Leu Leu His Phe Lys Ile Pro Ala Phe Ile Phe  
35 40

&lt;210&gt; 75

&lt;211&gt; 37

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 75

Met Cys Cys Phe Gly Tyr Thr His Ser Phe Phe Phe Asn Arg Ile Tyr  
1 5 10 15Cys Leu Val Ser Leu Trp Thr Gly Thr Val Asp Ala His Leu Lys Val  
20 25 30Lys Cys His Phe Phe  
35

&lt;210&gt; 76

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 76

Met Phe Ser Val Gln Thr Gly Asn Val Lys Ser Ile Leu Cys Gly Leu  
1 5 10 15Thr Gly Asn Leu Phe Met Ser Leu Tyr Leu Lys Pro Val Leu Leu Ser  
20 25 30Val Val Leu  
35

&lt;210&gt; 77

&lt;211&gt; 34

<212> PRT  
 <213> Homo sapiens

<400> 77  
 Met Ile Tyr Phe Leu Lys Ser Asn Phe Asn Ser Ser Cys Leu Thr Glu  
 1 5 10 15

Ala Cys Gln Tyr Met Cys Cys Ile Phe Phe Ala Phe Val Glu Lys Leu  
 20 25 30

His Ile

<210> 78  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 78  
 Met Pro Arg Ala Ile Val Phe Pro Pro Phe Phe Ala Ser Phe Ser Tyr  
 1 5 10 15

Pro Leu Phe Gln Leu Gln Met Pro Lys Lys Met Pro Thr Asp Thr Thr  
 20 25 30

Leu Pro

<210> 79  
 <211> 190  
 <212> PRT  
 <213> Homo sapiens

<400> 79  
 Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val  
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Leu Gly Asp Leu Gln Ala Ala Pro Glu Ala Gln Val Ser Val Gln Pro  
 20 25 30

Asn Phe Gln Gln Asp Lys Phe Leu Gly Arg Trp Phe Ser Ala Gly Leu  
 35 40 45

Ala Ser Asn Ser Ser Trp Leu Arg Glu Lys Lys Ala Ala Leu Ser Met  
 50 55 60

Cys Lys Ser Val Val Ala Pro Ala Thr Asp Gly Gly Leu Asn Leu Thr  
 65 70 75 80

Ser Thr Phe Leu Arg Lys Asn Gln Cys Glu Thr Arg Thr Met Leu Leu  
 85 90 95

Gln Pro Ala Gly Ser Leu Gly Ser Tyr Ser Tyr Arg Ser Pro His Trp  
 100 105 110

Gly Ser Thr Tyr Ser Val Ser Val Val Glu Thr Asp Tyr Asp Gln Tyr  
 115 120 125

Ala Leu Leu Tyr Ser Gln Gly Ser Lys Gly Pro Gly Glu Asp Phe Arg  
 130 135 140

Met Ala Thr Leu Tyr Ser Arg Thr Gln Thr Pro Arg Ala Glu Leu Lys  
 145 150 155 160

Glu Lys Phe Thr Ala Phe Cys Lys Ala Gln Gly Phe Thr Glu Asp Thr  
 165 170 175

Ile Val Phe Leu Pro Gln Thr Asp Lys Cys Met Thr Glu Gln  
 180 185 190

<210> 80  
 <211> 170  
 <212> PRT  
 <213> Homo sapiens

<400> 80  
 Met Ala Ser Gln Lys Arg Pro Ser Gln Arg His Gly Ser Lys Tyr Leu  
 1 5 10 15

Ala Thr Ala Ser Thr Met Asp His Ala Arg His Gly Phe Leu Pro Arg  
 20 25 30

His Arg Asp Thr Gly Ile Leu Asp Ser Ile Gly Arg Phe Gly Gly Asp  
 35 40 45

Arg Gly Ala Pro Lys Arg Gly Ser Gly Lys Asp Ser His His Pro Ala  
 50 55 60

Arg Thr Ala His Tyr Gly Ser Leu Pro Gln Lys Ser His Gly Arg Thr  
 65 70 75 80

Gln Asp Glu Asn Pro Val Val His Phe Phe Lys Asn Ile Val Thr Pro  
 85 90 95

Arg Thr Pro Pro Pro Ser Gln Gly Lys Gly Arg Gly Leu Ser Leu Ser  
 100 105 110

Arg Phe Ser Trp Gly Ala Glu Gly Gln Arg Pro Gly Phe Gly Tyr Gly  
 115 120 125

Gly Arg Ala Ser Asp Tyr Lys Ser Ala His Lys Gly Phe Lys Gly Val  
 130 135 140

Asp Ala Gln Gly Thr Leu Ser Lys Ile Phe Lys Leu Gly Gly Arg Asp  
 145 150 155 160

Ser Arg Ser Gly Ser Pro Met Ala Arg Arg  
 165 170

<210> 81  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 81  
 Ile Arg Ser Ala Lys Leu Gly Phe Cys Cys Leu Asn Ser Ala Leu Gly  
 1 5 10 15

Pro Gln Ile Asn Arg Cys Glu Cys Ser Phe Phe Pro Leu Cys Glu Glu  
 20 25 30

Ala Val Thr Pro Gln Gln  
 35

<210> 82  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 82  
 Leu Leu Gly Cys Asn Cys Phe Phe Thr Gln Gly Glu Lys Thr Thr Phe  
 1 5 10 15

Thr Ser Val Tyr Leu Arg Thr Gln Cys Arg Val Gln Ala Ala Lys Pro  
 20 25 30

Gln Leu Ser Arg Ser Asn  
35

<210> 83  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 83  
Phe Ile Tyr Lys Lys Ile Lys Leu Glu Ile Val Leu Asp Phe Ser Ser  
1 5 10 15

Tyr Cys Trp Gly Val Thr Ala Ser Ser His Arg Gly Lys Lys Leu His  
20 25 30

Ser His Arg Phe Ile  
35

<210> 84  
<211> 335  
<212> PRT  
<213> Homo sapiens

<400> 84  
Met Gly Ala Ser Ser Ser Ala Leu Ala Arg Leu Gly Leu Pro Ala  
1 5 10 15

Arg Pro Trp Pro Arg Trp Leu Gly Val Ala Ala Leu Gly Leu Ala Ala  
20 25 30

Val Ala Leu Gly Thr Val Ala Trp Arg Arg Ala Trp Pro Arg Arg Arg  
35 40 45

Arg Arg Leu Gln Gln Val Gly Thr Val Ala Lys Leu Trp Ile Tyr Pro  
50 55 60

Val Lys Ser Cys Lys Gly Val Pro Val Ser Glu Ala Glu Cys Thr Ala  
65 70 75 80

Met Gly Leu Arg Ser Gly Asn Leu Arg Asp Arg Phe Trp Leu Val Ile  
85 90 95

Lys Glu Asp Gly His Met Val Thr Ala Arg Gln Glu Pro Arg Leu Val  
100 105 110

Leu Ile Ser Ile Ile Tyr Glu Asn Asn Cys Leu Ile Phe Arg Ala Pro  
 115 120 125

Asp Met Asp Gln Leu Val Leu Pro Ser Lys Gln Pro Ser Ser Asn Lys  
 130 135 140

Leu His Asn Cys Arg Ile Phe Gly Leu Asp Ile Lys Gly Arg Asp Cys  
 145 150 155 160

Gly Asn Glu Ala Ala Lys Trp Phe Thr Asn Phe Leu Lys Thr Glu Ala  
 165 170 175

Tyr Arg Leu Val Gln Phe Glu Thr Asn Met Lys Gly Arg Thr Ser Arg  
 180 185 190

Lys Leu Leu Pro Thr Leu Asp Gln Asn Phe Gln Val Ala Tyr Pro Asp  
 195 200 205

Tyr Cys Pro Leu Leu Ile Met Thr Asp Ala Ser Leu Val Asp Leu Asn  
 210 215 220

Thr Arg Met Glu Lys Lys Met Lys Met Glu Asn Phe Arg Pro Asn Ile  
 225 230 235 240

Val Val Thr Gly Cys Asp Ala Phe Glu Glu Asp Thr Trp Asp Glu Leu  
 245 250 255

Leu Ile Gly Ser Val Glu Val Lys Lys Val Met Ala Cys Pro Arg Cys  
 260 265 270

Ile Leu Thr Thr Val Asp Pro Asp Thr Gly Val Ile Asp Arg Lys Gln  
 275 280 285

Pro Leu Asp Thr Leu Lys Ser Tyr Arg Leu Cys Asp Pro Ser Glu Arg  
 290 295 300

Glu Leu Tyr Lys Leu Ser Pro Leu Phe Gly Ile Tyr Tyr Ser Val Glu  
 305 310 315 320

Lys Ile Gly Ser Leu Arg Val Gly Asp Pro Val Tyr Arg Met Val  
 325 330 335

&lt;210&gt; 85

&lt;211&gt; 459

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 85

Met Ile Lys Arg Phe Leu Glu Asp Thr Thr Asp Asp Gly Glu Leu Ser  
1 5 10 15

;

Lys Phe Val Lys Asp Phe Ser Gly Asn Ala Ser Cys His Pro Pro Glu  
20 25 30Ala Lys Thr Trp Ala Ser Arg Pro Gln Val Pro Glu Pro Arg Pro Gln  
35 40 45Ala Pro Asp Leu Tyr Asp Asp Asp Leu Glu Phe Arg Pro Pro Ser Arg  
50 55 60Pro Gln Ser Ser Asp Asn Gln Gln Tyr Phe Cys Ala Pro Ala Pro Leu  
65 70 75 80Ser Pro Ser Ala Arg Pro Arg Ser Pro Trp Gly Lys Leu Asp Pro Tyr  
85 90 95Asp Ser Ser Glu Asp Asp Lys Glu Tyr Val Gly Phe Ala Thr Leu Pro  
100 105 110Asn Gln Val His Arg Lys Ser Val Lys Lys Gly Phe Asp Phe Thr Leu  
115 120 125Met Val Ala Gly Glu Ser Gly Leu Gly Lys Ser Thr Leu Val Asn Ser  
130 135 140Leu Phe Leu Thr Asp Leu Tyr Arg Asp Arg Lys Leu Leu Gly Ala Glu  
145 150 155 160Glu Arg Ile Met Gln Thr Val Glu Ile Thr Lys His Ala Val Asp Ile  
165 170 175Glu Glu Lys Gly Val Arg Leu Arg Leu Thr Ile Val Asp Thr Pro Gly  
180 185 190Phe Gly Asp Ala Val Asn Asn Thr Glu Cys Trp Lys Pro Val Ala Glu  
195 200 205

Tyr Ile Asp Gln Gln Phe Glu Gln Tyr Phe Arg Asp Glu Ser Gly Leu  
 210 215 220

Asn Arg Lys Asn Ile Gln Asp Asn Arg Val His Cys Cys Leu Tyr Phe  
 225 230 235 240

Ile Ser Pro Phe Gly His Gly Leu Arg Pro Leu Asp Val Glu Phe Met  
 245 250 255

Lys Ala Leu His Gln Arg Val Asn Ile Val Pro Ile Leu Ala Lys Ala  
 260 265 270

Asp Thr Leu Thr Pro Pro Glu Val Asp His Lys Lys Arg Lys Ile Arg  
 275 280 285

Glu Glu Ile Glu His Phe Gly Ile Lys Ile Tyr Gln Phe Pro Asp Cys  
 290 295 300

Asp Ser Asp Glu Asp Glu Asp Phe Lys Leu Gln Asp Gln Ala Leu Lys  
 305 310 315 320

Glu Ser Ile Pro Phe Ala Val Ile Gly Ser Asn Thr Val Val Glu Ala  
 325 330 335

Arg Gly Arg Arg Val Arg Gly Arg Leu Tyr Pro Trp Gly Ile Val Glu  
 340 345 350

Val Glu Asn Pro Gly His Cys Asp Phe Val Lys Leu Arg Thr Met Leu  
 355 360 365

Val Arg Thr His Met Gln Asp Leu Lys Asp Val Thr Arg Glu Thr His  
 370 375 380

Tyr Glu Asn Tyr Arg Ala Gln Cys Ile Gln Ser Met Thr Arg Leu Val  
 385 390 395 400

Val Lys Glu Arg Asn Arg Asn Lys Leu Thr Arg Glu Ser Gly Thr Asp  
 405 410 415

Phe Pro Ile Pro Ala Val Pro Pro Gly Thr Asp Pro Glu Thr Glu Lys  
 420 425 430

Leu Ile Arg Glu Lys Asp Glu Glu Leu Arg Arg Met Gln Glu Met Leu  
 435 440 445

His Lys Ile Gln Lys Gln Met Lys Glu Asn Tyr  
 450 455

<210> 86  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 86  
 Met Ala Thr Lys Ile Asp Lys Glu Ala Cys Arg Ala Ala Tyr Asn Leu  
 1 5 10 15

Val Arg Asp Asp Gly Ser Ala Val Ile Trp Val Thr Phe Lys Tyr Asp  
 20 25 30

Gly Ser Thr Ile Val Pro Gly Glu Gln Gly Ala Glu Tyr Gln His Phe  
 35 40 45

Ile Gln Gln Cys Thr Asp Asp Val Arg Leu Phe Ala Phe Val Arg Phe  
 50 55 60

Thr Thr Gly Asp Ala Met Ser Lys Arg Ser Lys Phe Ala Leu Ile Thr  
 65 70 75 80

Trp Ile Gly Glu Asn Val Ser Gly Leu Gln Arg Ala Lys Thr Gly Thr  
 85 90 95

Asp Lys Thr Leu Val Lys Glu Val Val Gln Asn Phe Ala Lys Glu Phe  
 100 105 110

Val Ile Ser Asp Arg Lys Glu Leu Glu Glu Asp Phe Ile Lys Ser Glu  
 115 120 125

Leu Lys Lys Ala Gly Gly Ala Asn Tyr Asp Ala Gln Thr Glu  
 130 135 140

<210> 87  
 <211> 449  
 <212> PRT  
 <213> Homo sapiens

<400> 87  
 Met Met Lys Thr Leu Leu Leu Phe Val Gly Leu Leu Leu Thr Trp Glu  
 1 5 10 15

Ser Gly Gln Val Leu Gly Asp Gln Thr Val Ser Asp Asn Glu Leu Gln  
 20 25 30

Glu Met Ser Asn Gln Gly Ser Lys Tyr Val Asn Lys Glu Ile Gln Asn  
 35 40 45

Ala Val Asn Gly Val Lys Gln Ile Lys Thr Leu Ile Glu Lys Thr Asn  
 50 55 60

Glu Glu Arg Lys Thr Leu Leu Ser Asn Leu Glu Glu Ala Lys Lys Lys  
 65 70 75 80

Lys Glu Asp Ala Leu Asn Glu Thr Arg Glu Ser Glu Thr Lys Leu Lys  
 85 90 95

Glu Leu Pro Gly Val Cys Asn Glu Thr Met Met Ala Leu Trp Glu Glu  
 100 105 110

Cys Lys Pro Cys Leu Lys Gln Thr Cys Met Lys Phe Tyr Ala Arg Val  
 115 120 125

Cys Arg Ser Gly Ser Gly Leu Val Gly Arg Gln Leu Glu Glu Phe Leu  
 130 135 140

Asn Gln Ser Ser Pro Phe Tyr Phe Trp Met Asn Gly Asp Arg Ile Asp  
 145 150 155 160

Ser Leu Leu Glu Asn Asp Arg Gln Gln Thr His Met Leu Asp Val Met  
 165 170 175

Gln Asp His Phe Ser Arg Ala Ser Ser Ile Ile Asp Glu Leu Phe Gln  
 180 185 190

Asp Arg Phe Phe Thr Arg Glu Pro Gln Asp Thr Tyr His Tyr Leu Pro  
 195 200 205

Phe Ser Leu Pro His Arg Arg Pro His Phe Phe Phe Pro Lys Ser Arg  
 210 215 220

Ile Val Arg Ser Leu Met Pro Phe Ser Pro Tyr Glu Pro Leu Asn Phe  
225 230 235 240

His Ala Met Phe Gln Pro Phe Leu Glu Met Ile His Glu Ala Gln Gln  
245 250 255

Ala Met Asp Ile His Phe His Ser Pro Ala Phe Gln His Pro Pro Thr  
260 265 270

Glu Phe Ile Arg Glu Gly Asp Asp Asp Arg Thr Val Cys Arg Glu Ile  
275 280 285

Arg His Asn Ser Thr Gly Cys Leu Arg Met Lys Asp Gln Cys Asp Lys  
290 295 300

Cys Arg Glu Ile Leu Ser Val Asp Cys Ser Thr Asn Asn Pro Ser Gln  
305 310 315 320

Ala Lys Leu Arg Arg Glu Leu Asp Glu Ser Leu Gln Val Ala Glu Arg  
325 330 335

Leu Thr Arg Lys Tyr Asn Glu Leu Leu Lys Ser Tyr Gln Trp Lys Met  
340 345 350

Leu Asn Thr Ser Ser Leu Leu Glu Gln Leu Asn Glu Gln Phe Asn Trp  
355 360 365

Val Ser Arg Leu Ala Asn Leu Thr Gln Gly Glu Asp Gln Tyr Tyr Leu  
370 375 380

Arg Val Thr Thr Val Ala Ser His Thr Ser Asp Ser Asp Val Pro Ser  
385 390 395 400

Gly Val Thr Glu Val Val Lys Leu Phe Asp Ser Asp Pro Ile Thr  
405 410 415

Val Thr Val Pro Val Glu Val Ser Arg Lys Asn Pro Lys Phe Met Glu  
420 425 430

Thr Val Ala Glu Lys Ala Leu Gln Glu Tyr Arg Lys Lys His Arg Glu  
435 440 445

Glu

<210> 88  
 <211> 416  
 <212> PRT  
 <213> Homo sapiens

<400> 88  
 Met Glu Leu Arg Val Gly Asn Lys Tyr Arg Leu Gly Arg Lys Ile Gly  
 1 5 10 15

Ser Gly Ser Phe Gly Asp Ile Tyr Leu Gly Ala Asn Ile Ala Ser Gly  
 20 25 30

Glu Glu Val Ala Ile Lys Leu Glu Cys Val Lys Thr Lys His Pro Gln  
 35 40 45

Leu His Ile Glu Ser Lys Phe Tyr Lys Met Met Gln Gly Gly Val Gly  
 50 55 60

Ile Pro Ser Ile Lys Trp Cys Gly Ala Glu Gly Asp Tyr Asn Val Met  
 65 70 75 80

Val Met Glu Leu Leu Gly Pro Ser Leu Glu Asp Leu Phe Asn Phe Cys  
 85 90 95

Ser Arg Lys Phe Ser Leu Lys Thr Val Leu Leu Ala Asp Gln Met  
 100 105 110

Ile Ser Arg Ile Glu Tyr Ile His Ser Lys Asn Phe Ile His Arg Asp  
 115 120 125

Val Lys Pro Asp Asn Phe Leu Met Gly Leu Gly Lys Lys Gly Asn Leu  
 130 135 140

Val Tyr Ile Ile Asp Phe Gly Leu Ala Lys Lys Tyr Arg Asp Ala Arg  
 145 150 155 160

Thr His Gln His Ile Pro Tyr Arg Glu Asn Lys Asn Leu Thr Gly Thr  
 165 170 175

Ala Arg Tyr Ala Ser Ile Asn Thr His Leu Gly Ile Glu Gln Ser Arg  
 180 185 190

Arg Asp Asp Leu Glu Ser Leu Gly Tyr Val Leu Met Tyr Phe Asn Leu  
 195 200 205

Gly Ser Leu Pro Trp Gln Gly Leu Lys Ala Ala Thr Lys Arg Gln Lys  
 210 215 220

Tyr Glu Arg Ile Ser Glu Lys Lys Met Ser Thr Pro Ile Glu Val Leu  
 225 230 235 240

Cys Lys Gly Tyr Pro Ser Glu Phe Ser Thr Tyr Leu Asn Phe Cys Arg  
 245 250 255

Ser Leu Arg Phe Asp Asp Lys Pro Asp Tyr Ser Tyr Leu Arg Gln Leu  
 260 265 270

Phe Arg Asn Leu Phe His Arg Gln Gly Phe Ser Tyr Asp Tyr Val Phe  
 275 280 285

Asp Trp Asn Met Leu Lys Phe Gly Ala Ala Arg Asn Pro Glu Asp Val  
 290 295 300

Asp Arg Glu Arg Arg Glu His Glu Arg Glu Arg Met Gly Gln Leu  
 305 310 315 320

Arg Gly Ser Ala Thr Arg Ala Leu Pro Pro Gly Pro Pro Thr Gly Ala  
 325 330 335

Thr Ala Asn Arg Leu Arg Ser Ala Ala Glu Pro Val Ala Ser Thr Pro  
 340 345 350

Ala Ser Arg Ile Gln Pro Ala Gly Asn Thr Ser Pro Arg Ala Ile Ser  
 355 360 365

Arg Val Asp Arg Glu Arg Lys Val Ser Met Arg Leu His Arg Gly Ala  
 370 375 380

Pro Ala Asn Val Ser Ser Ser Asp Leu Thr Gly Arg Gln Glu Val Ser  
 385 390 395 400

Arg Ile Pro Ala Ser Gln Thr Ser Val Pro Phe Asp His Leu Gly Lys  
 405 410 415

<210> 89  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 89  
 Met Thr Thr Ala Ser Thr Ser Gln Val Arg Gln Asn Tyr His Gln Asp  
 1 5 10 15

Ser Glu Ala Ala Ile Asn Arg Gln Ile Asn Leu Glu Leu Tyr Ala Ser  
 20 25 30

Tyr Val Tyr Leu Ser Met Ser Tyr Tyr Phe Asp Arg Asp Asp Val Ala  
 35 40 45

Leu Lys Asn Phe Ala Lys Tyr Phe Leu His Gln Ser His Glu Glu Arg  
 50 55 60

Glu His Ala Glu Lys Leu Met Lys Leu Gln Asn Gln Arg Gly Gly Arg  
 65 70 75 80

Ile Phe Leu Gln Asp Ile Lys Lys Pro Asp Cys Asp Asp Trp Glu Ser  
 85 90 95

Gly Leu Asn Ala Met Glu Cys Ala Leu His Leu Glu Lys Met  
 100 105 110

<210> 90  
 <211> 814  
 <212> PRT  
 <213> Homo sapiens

<400> 90  
 Met Arg Leu Ala Leu Leu Trp Ala Leu Gly Leu Leu Gly Ala Gly Ser  
 1 5 10 15

Pro Leu Pro Ser Trp Pro Leu Pro Asn Ile Gly Gly Thr Glu Glu Gln  
 20 25 30

Gln Ala Glu Ser Glu Lys Ala Pro Arg Glu Pro Leu Glu Pro Gln Val  
 35 40 45

Leu Gln Asp Asp Leu Pro Ile Ser Leu Lys Lys Val Leu Gln Thr Ser  
 50 55 60

Leu Pro Glu Pro Leu Arg Ile Lys Leu Glu Leu Asp Gly Asp Ser His  
 65                   70                   75                   80

Ile Leu Glu Leu Leu Gln Asn Arg Glu Leu Val Pro Gly Arg Pro Thr  
 85                   90                   95

Leu Val Trp Tyr Gln Pro Asp Gly Thr Arg Val Val Ser Glu Gly His  
 100               105               110

Thr Leu Glu Asn Cys Cys Tyr Gln Gly Arg Val Arg Gly Tyr Ala Gly  
 115               120               125

Ser Trp Val Ser Ile Cys Thr Cys Ser Gly Leu Arg Gly Leu Val Val  
 130               135               140

Leu Thr Pro Glu Arg Ser Tyr Thr Leu Glu Gln Gly Pro Gly Asp Leu  
 145               150               155               160

Gln Gly Pro Pro Ile Ile Ser Arg Ile Gln Asp Leu His Leu Pro Gly  
 165               170               175

His Thr Cys Ala Leu Ser Trp Arg Glu Ser Val His Thr Gln Thr Pro  
 180               185               190

Pro Glu His Pro Leu Gly Gln Arg His Ile Arg Arg Arg Asp Val  
 195               200               205

Val Thr Glu Thr Lys Thr Val Glu Leu Val Ile Val Ala Asp His Ser  
 210               215               220

Glu Ala Gln Lys Tyr Arg Asp Phe Gln His Leu Leu Asn Arg Thr Leu  
 225               230               235               240

Glu Val Ala Leu Leu Asp Thr Phe Phe Arg Pro Leu Asn Val Arg  
 245               250               255

Val Ala Leu Val Gly Leu Glu Ala Trp Thr Gln Arg Asp Leu Val Glu  
 260               265               270

Ile Ser Pro Asn Pro Ala Val Thr Leu Glu Asn Phe Leu His Trp Arg  
 275               280               285

Arg Ala His Leu Leu Pro Arg Leu Pro His Asp Ser Ala Gln Leu Val  
 290 295 300  
  
 Thr Gly Thr Ser Phe Ser Gly Pro Thr Val Gly Met Ala Ile Gln Asn  
 305 310 315 320  
  
 Ser Ile Cys Ser Pro Asp Phe Ser Gly Gly Val Asn Met Asp His Ser  
 325 330 335  
  
 Thr Ser Ile Leu Gly Val Ala Ser Ser Ile Ala His Glu Leu Gly His  
 340 345 350  
  
 Ser Leu Gly Leu Asp His Asp Leu Pro Gly Asn Ser Cys Pro Cys Pro  
 355 360 365  
  
 Gly Pro Ala Pro Ala Lys Thr Cys Ile Met Glu Ala Ser Thr Asp Phe  
 370 375 380  
  
 Leu Pro Gly Leu Asn Phe Ser Asn Cys Ser Arg Arg Ala Leu Glu Lys  
 385 390 395 400  
  
 Ala Leu Leu Asp Gly Met Gly Ser Cys Leu Phe Glu Arg Leu Pro Ser  
 405 410 415  
  
 Leu Pro Pro Met Ala Ala Phe Cys Gly Asn Met Phe Val Glu Pro Gly  
 420 425 430  
  
 Glu Gln Cys Asp Cys Gly Phe Leu Asp Asp Cys Val Asp Pro Cys Cys  
 435 440 445  
  
 Asp Ser Leu Thr Cys Gln Leu Arg Pro Gly Ala Gln Cys Ala Ser Asp  
 450 455 460  
  
 Gly Pro Cys Cys Gln Asn Cys Gln Leu Arg Pro Ser Gly Trp Gln Cys  
 465 470 475 480  
  
 Arg Pro Thr Arg Gly Asp Cys Asp Leu Pro Glu Phe Cys Pro Gly Asp  
 485 490 495  
  
 Ser Ser Gln Cys Pro Pro Asp Val Ser Leu Gly Asp Gly Glu Pro Cys  
 500 505 510

Ala Gly Gly Gln Ala Val Cys Met His Gly Arg Cys Ala Ser Tyr Ala  
 515 520 525

Gln Gln Cys Gln Ser Leu Trp Gly Pro Gly Ala Gln Pro Ala Ala Pro  
 530 535 540

Leu Cys Leu Gln Thr Ala Asn Thr Arg Gly Asn Ala Phe Gly Ser Cys  
 545 550 555 560

Gly Arg Asn Pro Ser Gly Ser Tyr Val Ser Cys Thr Pro Arg Asp Ala  
 565 570 575

Ile Cys Gly Gln Leu Gln Cys Gln Thr Gly Arg Thr Gln Pro Leu Leu  
 580 585 590

Gly Ser Ile Arg Asp Leu Leu Trp Glu Thr Ile Asp Val Asn Gly Thr  
 595 600 605

Glu Leu Asn Cys Ser Trp Val His Leu Asp Leu Gly Ser Asp Val Ala  
 610 615 620

Gln Pro Leu Leu Thr Leu Pro Gly Thr Ala Cys Gly Pro Gly Leu Val  
 625 630 635 640

Cys Ile Asp His Arg Cys Gln Arg Val Asp Leu Leu Gly Ala Gln Glu  
 645 650 655

Cys Arg Ser Lys Cys His Gly His Gly Val Cys Asp Ser Asn Arg His  
 660 665 670

Cys Tyr Cys Glu Glu Gly Trp Ala Pro Pro Asp Cys Thr Thr Gln Leu  
 675 680 685

Lys Ala Thr Ser Ser Leu Thr Thr Gly Leu Leu Leu Ser Leu Leu Val  
 690 695 700

Leu Leu Val Leu Val Met Leu Gly Ala Gly Tyr Trp Tyr Arg Ala Arg  
 705 710 715 720

Leu His Gln Arg Leu Cys Gln Leu Lys Gly Pro Thr Cys Gln Tyr Arg  
 725 730 735

Ala Ala Gln Ser Gly Pro Ser Glu Arg Pro Gly Pro Pro Gln Arg Ala  
 740 745 750

Leu Leu Ala Arg Gly Thr Lys Ser Gln Gly Pro Ala Lys Pro Pro Pro  
 755 760 765

Pro Arg Lys Pro Leu Pro Ala Asp Pro Gln Gly Arg Cys Pro Ser Gly  
 770 775 780

Asp Leu Pro Gly Pro Gly Ala Gly Ile Pro Pro Leu Val Val Pro Ser  
 785 790 795 800

Arg Pro Ala Pro Pro Pro Pro Thr Val Ser Ser Leu Tyr Leu  
 805 810

<210> 91

<211> 55

<212> PRT

<213> Homo sapiens

<400> 91

Met Asn Leu Ser Phe Arg Glu Phe Asn Gln Glu Lys Arg Val Gly Gly  
 1 5 10 15

Ile Ser Trp Gly Pro Lys Gly Arg Leu Ser Gly Ile Phe Ser Thr Ile  
 20 25 30

Gln Asn Gln Gln Ser Gln Lys Arg Gly Met Ser Ser Asn Ser Leu  
 35 40 45

Lys Arg Thr Pro Gln Asn Ser  
 50 55

<210> 92

<211> 54

<212> PRT

<213> Homo sapiens

<400> 92

Met Gly Asn Gln Arg Trp His Ala Lys Phe Asn Ser Gly Leu Arg Tyr  
 1 5 10 15

Pro His Cys Pro His Gln Ala Ser Pro Ala Leu Thr Val Glu Pro His  
 20 25 30

Gly Glu Glu His Val Leu Glu Arg Asp Pro Phe Val Asn Cys Phe Val  
 35 40 45

Val Phe Ser Ser Met Asn  
 50

<210> 93  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 93  
 Met Leu Cys Ala Gln Gly Ala Ala Gly Cys Gln Gln His Leu Ser Leu  
 1 5 10 15

Asn Thr Ile Ser Leu Cys Ala Glu Lys Thr Gly Asn Gln Arg Ile Asn  
 20 25 30

Ile Thr Ser Pro Gly Trp Arg Thr Ile Ser Cys Asp Phe Ala Ala Glu  
 35 40 45

Phe Thr His  
 50

<210> 94  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 94  
 Met Pro Pro Leu Ile Pro His Ala Ala Lys Arg Ile Gly Thr Leu Ser  
 1 5 10 15

Gly Pro Gly Thr Val Val Met Ala Ile Ser Tyr Phe Thr His Thr Arg  
 20 25 30

Pro Phe Lys Val Ser Leu Pro Gln Ala Ile Lys  
 35 40

<210> 95  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 95  
 Met Val Glu Asn Ile Pro Glu Ser Leu Pro Phe Gly Pro Gln Leu Met  
 1 5 10 15

Pro Pro Thr Leu Phe Ser Trp Leu Asn Ser Leu Lys Glu Arg Phe Met  
 20 25 30

Cys Tyr Cys Pro Val Ser Gln  
 35

<210> 96  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 96  
 Met Ser Gln Cys Thr Ser Tyr Pro Leu Ile Gln Lys Glu Glu His Phe  
 1 5 10 15

Ala Gln Arg Lys Ile Lys Arg Ser Met Asn Val Ile Phe Tyr Leu Leu  
 20 25 30

Phe Ser Val Gly  
 35

<210> 97  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 97  
 Met Gly Ser Ser Leu Pro Ile Gly Phe Leu Leu His Thr Ala Gly Leu  
 1 5 10 15

Ser Leu Tyr Phe Lys Lys Lys Lys Lys Lys Lys Asp Lys Asn Cys  
 20 25 30

His

<210> 98  
 <211> 317  
 <212> PRT  
 <213> Homo sapiens

<400> 98  
 Met Ser Glu Gly Val Gly Thr Phe Arg Met Val Pro Glu Glu Gln  
 1 5 10 15

Glu Leu Arg Ala Gln Leu Glu Gln Leu Thr Thr Lys Asp His Gly Pro  
 20 25 30

Val Phe Gly Pro Cys Ser Gln Leu Pro Arg His Thr Leu Gln Lys Ala  
 35 40 45

Lys Asp Glu Leu Asn Glu Arg Glu Glu Thr Arg Glu Glu Ala Val Arg  
 50 55 60

Glu Leu Gln Glu Met Val Gln Ala Gln Ala Ala Ser Gly Glu Glu Leu  
 65 70 75 80

Ala Val Ala Val Ala Glu Arg Val Gln Glu Lys Asp Ser Gly Phe Phe  
 85 90 95

Leu Arg Phe Ile Arg Ala Arg Lys Phe Asn Val Gly Arg Ala Tyr Glu  
 100 105 110

Leu Leu Arg Gly Tyr Val Asn Phe Arg Leu Gln Tyr Pro Glu Leu Phe  
 115 120 125

Asp Ser Leu Ser Pro Glu Ala Val Arg Cys Thr Ile Glu Ala Gly Tyr  
 130 135 140

Pro Gly Val Leu Ser Ser Arg Asp Lys Tyr Gly Arg Val Val Met Leu  
 145 150 155 160

Phe Asn Ile Glu Asn Trp Gln Ser Gln Glu Ile Thr Phe Asp Glu Ile  
 165 170 175

Leu Gln Ala Tyr Cys Phe Ile Leu Glu Lys Leu Leu Glu Asn Glu Glu  
 180 185 190

Thr Gln Ile Asn Gly Phe Cys Ile Ile Glu Asn Phe Lys Gly Phe Thr  
 195 200 205

Met Gln Gln Ala Ala Ser Leu Arg Thr Ser Asp Leu Arg Lys Met Val  
 210 215 220

Asp Met Leu Gln Asp Ser Phe Pro Ala Arg Phe Lys Ala Ile His Phe  
 225 230 235 240

Ile His Gln Pro Trp Tyr Phe Thr Thr Tyr Asn Val Val Lys Pro  
 245 250 255

Phe Leu Lys Ser Lys Leu Leu Glu Arg Val Phe Val His Gly Asp Asp  
 260 265 270

Leu Ser Gly Phe Tyr Gln Glu Ile Asp Glu Asn Ile Leu Pro Ser Asp  
 275 280 285

Phe Gly Gly Thr Leu Pro Lys Tyr Asp Gly Lys Ala Val Ala Glu Gln  
 290 295 300

Leu Phe Gly Pro Gln Ala Gln Ala Glu Asn Thr Ala Phe  
 305 310 315

<210> 99  
 <211> 375  
 <212> PRT  
 <213> Homo sapiens

<400> 99  
 Met Glu Glu Glu Ile Ala Ala Leu Val Ile Asp Asn Gly Ser Gly Met  
 1 5 10 15

Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala Pro Arg Ala Val Phe Pro  
 20 25 30

Ser Ile Val Gly Arg Pro Arg His Gln Gly Val Met Val Gly Met Gly  
 35 40 45

Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala Gln Ser Lys Arg Gly Ile  
 50 55 60

Leu Thr Leu Lys Tyr Pro Ile Glu His Gly Ile Val Thr Asn Trp Asp  
 65 70 75 80

Asp Met Glu Lys Ile Trp His His Thr Phe Tyr Asn Glu Leu Arg Val  
 85 90 95

Ala Pro Glu Glu His Pro Val Leu Leu Thr Glu Ala Pro Leu Asn Pro  
 100 105 110

Lys Ala Asn Arg Glu Lys Met Thr Gln Ile Met Phe Glu Thr Phe Asn  
 115 120 125

Thr Pro Ala Met Tyr Val Ala Ile Gln Ala Val Leu Ser Leu Tyr Ala  
 130 135 140

Ser Gly Arg Thr Thr Gly Ile Val Met Asp Ser Gly Asp Gly Val Thr  
 145 150 155 160

His Thr Val Pro Ile Tyr Glu Gly Tyr Ala Leu Pro His Ala Ile Leu  
 165 170 175

Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr Asp Tyr Leu Met Lys Ile  
 180 185 190

Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr Ala Glu Arg Glu Ile  
 195 200 205

Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr Val Ala Leu Asp Phe Glu  
 210 215 220

Gln Glu Met Ala Thr Ala Ala Ser Ser Ser Ser Leu Glu Lys Ser Tyr  
 225 230 235 / 240

Glu Leu Pro Asp Gly Gln Val Ile Thr Ile Gly Asn Glu Arg Phe Arg  
 245 250 255

Cys Pro Glu Ala Leu Phe Gln Pro Ser Phe Leu Gly Met Glu Ser Cys  
 260 265 270

Gly Ile His Glu Thr Thr Phe Asn Ser Ile Met Lys Cys Asp Val Asp  
 275 280 285

Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val Leu Ser Gly Gly Thr Thr  
 290 295 300

Met Tyr Pro Gly Ile Ala Asp Arg Met Gln Lys Glu Ile Thr Ala Leu  
 305 310 315 320

Ala Pro Ser Thr Met Lys Ile Lys Ile Ile Ala Pro Pro Glu Arg Lys  
 325 330 335

Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser Thr Phe  
 340 345 350

Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr Asp Glu Ser Gly Pro Ser  
 355 360 365

Ile Val His Arg Lys Cys Phe  
370 375

<210> 100  
<211> 582  
<212> PRT  
<213> Homo sapiens

<400> 100  
Met Ser Pro Ala Pro Arg Pro Ser Arg Cys Leu Leu Leu Pro Leu Leu  
1 5 10 15

Thr Leu Gly Thr Ala Leu Ala Ser Leu Gly Ser Ala Gln Ser Ser Ser  
20 25 30

Phe Ser Pro Glu Ala Trp Leu Gln Gln Tyr Gly Tyr Leu Pro Pro Gly  
35 40 45

Asp Leu Arg Thr His Thr Gln Arg Ser Pro Gln Ser Leu Ser Ala Ala  
50 55 60

Ile Ala Ala Met Gln Lys Phe Tyr Gly Leu Gln Val Thr Gly Lys Ala  
65 70 75 80

Asp Ala Asp Thr Met Lys Ala Met Arg Arg Pro Arg Cys Gly Val Pro  
85 90 95

Asp Lys Phe Gly Ala Glu Ile Lys Ala Asn Val Arg Arg Lys Arg Tyr  
100 105 110

Ala Ile Gln Gly Leu Lys Trp Gln His Asn Glu Ile Thr Phe Cys Ile  
115 120 125

Gln Asn Tyr Thr Pro Lys Val Gly Glu Tyr Ala Thr Tyr Glu Ala Ile  
130 135 140

Arg Lys Ala Phe Arg Val Trp Glu Ser Ala Thr Pro Leu Arg Phe Arg  
145 150 155 160

Glu Val Pro Tyr Ala Tyr Ile Arg Glu Gly His Glu Lys Gln Ala Asp  
165 170 175

Ile Met Ile Phe Phe Ala Glu Gly Phe His Gly Asp Ser Thr Pro Phe  
180 185 190

Asp Gly Glu Gly Gly Phe Leu Ala His Ala Tyr Phe Pro Gly Pro Asn  
 195 200 205

Ile Gly Gly Asp Thr His Phe Asp Ser Ala Glu Pro Trp Thr Val Arg  
 210 215 220

Asn Glu Asp Leu Asn Gly Asn Asp Ile Phe Leu Val Ala Val His Glu  
 225 230 235 240

Leu Gly His Ala Leu Gly Leu Glu His Ser Ser Asp Pro Ser Ala Ile  
 245 250 255

Met Ala Pro Phe Tyr Gln Trp Met Asp Thr Glu Asn Phe Val Leu Pro  
 260 265 270

Asp Asp Asp Arg Arg Gly Ile Gln Gln Leu Tyr Gly Gly Glu Ser Gly  
 275 280 285

Phe Pro Thr Lys Met Pro Pro Gln Pro Arg Thr Thr Ser Arg Pro Ser  
 290 295 300

Val Pro Asp Lys Pro Lys Asn Pro Thr Tyr Gly Pro Asn Ile Cys Asp  
 305 310 315 320

Gly Asn Phe Asp Thr Val Ala Met Leu Arg Gly Glu Met Phe Val Phe  
 325 330 335

Lys Glu Arg Trp Phe Trp Arg Val Arg Asn Asn Gln Val Met Asp Gly  
 340 345 350

Tyr Pro Met Pro Ile Gly Gln Phe Trp Arg Gly Leu Pro Ala Ser Ile  
 355 360 365

Asn Thr Ala Tyr Glu Arg Lys Asp Gly Lys Phe Val Phe Phe Lys Gly  
 370 375 380

Asp Lys His Trp Val Phe Asp Glu Ala Ser Leu Glu Pro Gly Tyr Pro  
 385 390 395 400

Lys His Ile Lys Glu Leu Gly Arg Gly Leu Pro Thr Asp Lys Ile Asp  
 405 410 415

Ala Ala Leu Phe Trp Met Pro Asn Gly Lys Thr Tyr Phe Phe Arg Gly  
 420 425 430

Asn Lys Tyr Tyr Arg Phe Asn Glu Glu Leu Arg Ala Val Asp Ser Glu  
 435 440 445

Tyr Pro Lys Asn Ile Lys Val Trp Glu Gly Ile Pro Glu Ser Pro Arg  
 450 455 460

Gly Ser Phe Met Gly Ser Asp Glu Val Phe Thr Tyr Phe Tyr Lys Gly  
 465 470 475 480

Asn Lys Tyr Trp Lys Phe Asn Asn Gln Lys Leu Lys Val Glu Pro Gly  
 485 490 495

Tyr Pro Lys Ser Ala Leu Arg Asp Trp Met Gly Cys Pro Ser Gly Gly  
 500 505 510

Arg Pro Asp Glu Gly Thr Glu Glu Glu Thr Glu Val Ile Ile Ile Glu  
 515 520 525

Val Asp Glu Glu Gly Gly Ala Val Ser Ala Ala Ala Val Val Leu  
 530 535 540

Pro Val Leu Leu Leu Leu Val Leu Ala Val Gly Leu Ala Val Phe  
 545 550 555 560

Phe Phe Arg Arg His Gly Thr Pro Arg Arg Leu Leu Tyr Cys Gln Arg  
 565 570 575

Ser Leu Leu Asp Lys Val  
 580

<210> 101  
 <211> 2285  
 <212> PRT  
 <213> Homo sapiens

<400> 101  
 Met Ala Ala Gln Val Ala Pro Ala Ala Ser Ser Leu Gly Asn Pro  
 1 5 10 15

Pro Pro Pro Pro Ser Glu Leu Lys Lys Ala Glu Gln Gln Gln Arg  
 20 25 30

Glu Glu Ala Gly Gly Glu Ala Ala Ala Ala Ala Ala Glu Arg Gly  
 35 40 45

Glu Met Lys Ala Ala Ala Gly Gln Glu Ser Glu Gly Pro Ala Val Gly  
 50 55 60

Pro Pro Gln Pro Leu Gly Lys Glu Leu Gln Asp Gly Ala Glu Ser Asn  
 65 70 75 80

Gly Gly Gly Gly Gly Ala Gly Ser Gly Gly Pro Gly Ala  
 85 90 95

Glu Pro Asp Leu Lys Asn Ser Asn Gly Asn Ala Gly Pro Arg Pro Ala  
 100 105 110

Leu Asn Asn Asn Leu Thr Glu Pro Pro Gly Gly Gly Gly Ser  
 115 120 125

Ser Asp Gly Val Gly Ala Pro Pro His Ser Ala Ala Ala Leu Pro  
 130 135 140

Pro Pro Ala Tyr Gly Phe Gly Gln Pro Tyr Gly Arg Ser Pro Ser Ala  
 145 150 155 160

Val Ala Ala Ala Ala Ala Val Phe His Gln Gln His Gly Gly Gln  
 165 170 175

Gln Ser Pro Gly Leu Ala Ala Leu Gln Ser Gly Gly Gly Gly Leu  
 180 185 190

Glu Pro Tyr Ala Gly Pro Gln Gln Asn Ser His Asp His Gly Phe Pro  
 195 200 205

Asn His Gln Tyr Asn Ser Tyr Tyr Pro Asn Arg Ser Ala Tyr Pro Pro  
 210 215 220

Pro Ala Pro Ala Tyr Ala Leu Ser Ser Pro Arg Gly Gly Thr Pro Gly  
 225 230 235 240

Ser Gly Ala Ala Ala Ala Ala Gly Ser Lys Pro Pro Pro Ser Ser Ser  
 245 250 255

Ala Ser Ala Ser Ser Ser Ser Ser Phe Ala Gln Gln Arg Phe Gly  
 260 265 270

Ala Met Gly Gly Gly Pro Ser Ala Ala Gly Gly Thr Pro Gln  
 275 280 285

Pro Thr Ala Thr Pro Thr Leu Asn Gln Leu Leu Thr Ser Pro Ser Ser  
 290 295 300

Ala Arg Gly Tyr Gln Gly Tyr Pro Gly Gly Asp Tyr Ser Gly Gly Pro  
 305 310 315 320

Gln Asp Gly Gly Ala Gly Lys Gly Pro Ala Asp Met Ala Ser Gln Cys  
 325 330 335

Trp Gly Ala Ala Ala Ala Ala Ala Ala Ala Ser Gly Gly  
 340 345 350

Ala Gln Gln Arg Ser His His Ala Pro Met Ser Pro Gly Ser Ser Gly  
 355 360 365

Gly Gly Gly Gln Pro Leu Ala Arg Thr Pro Gln Pro Ser Ser Pro Met  
 370 375 380

Asp Gln Met Gly Lys Met Arg Pro Gln Pro Tyr Gly Gly Thr Asn Pro  
 385 390 395 400

Tyr Ser Gln Gln Gln Gly Pro Pro Ser Gly Pro Gln Gln Gly His Gly  
 405 410 415

Tyr Pro Gly Gln Pro Tyr Gly Ser Gln Thr Pro Gln Arg Tyr Pro Met  
 420 425 430

Thr Met Gln Gly Arg Ala Gln Ser Ala Met Gly Gly Leu Ser Tyr Thr  
 435 440 445

Gln Gln Ile Pro Pro Tyr Gly Gln Gln Gly Pro Ser Gly Tyr Gly Gln  
 450 455 460

Gln Gly Gln Thr Pro Tyr Tyr Asn Gln Gln Ser Pro His Pro Gln Gln  
 465 470 475 480

Gln Gln Pro Pro Tyr Ser Gln Gln Pro Pro Ser Gln Thr Pro His Ala  
 485 490 495

Gln Pro Ser Tyr Gln Gln Pro Gln Ser Gln Pro Pro Gln Leu Gln  
 500 505 510

Ser Ser Gln Pro Pro Tyr Ser Gln Gln Pro Ser Gln Pro Pro His Gln  
 515 520 525

Gln Ser Pro Ala Pro Tyr Pro Ser Gln Gln Ser Thr Thr Gln Gln His  
 530 535 540

Pro Gln Ser Gln Pro Pro Tyr Ser Gln Pro Gln Ala Gln Ser Pro Tyr  
 545 550 555 560

Gln Gln Gln Gln Pro Gln Gln Pro Ala Pro Ser Thr Leu Ser Gln Gln  
 565 570 575

Ala Ala Tyr Pro Gln Pro Gln Ser Gln Gln Ser Gln Gln Thr Ala Tyr  
 580 585 590

Ser Gln Gln Arg Phe Pro Pro Pro Gln Glu Leu Ser Gln Asp Ser Phe  
 595 600 605

Gly Ser Gln Ala Ser Ser Ala Pro Ser Met Thr Ser Ser Lys Gly Gly  
 610 615 620

Gln Glu Asp Met Asn Leu Ser Leu Gln Ser Arg Pro Ser Ser Leu Pro  
 625 630 635 640

Asp Leu Ser Gly Ser Ile Asp Asp Leu Pro Met Gly Thr Glu Gly Ala  
 645 650 655

Leu Ser Pro Gly Val Ser Thr Ser Gly Ile Ser Ser Ser Gln Gly Glu  
 660 665 670

Gln Ser Asn Pro Ala Gln Ser Pro Phe Ser Pro His Thr Ser Pro His  
 675 680 685

Leu Pro Gly Ile Arg Gly Pro Ser Pro Ser Pro Val Gly Ser Pro Ala  
 690 695 700

Ser Val Ala Gln Ser Arg Ser Gly Pro Leu Ser Pro Ala Ala Val Pro  
 705 710 715 720

Gly Asn Gln Met Pro Pro Arg Pro Pro Ser Gly Gln Ser Asp Ser Ile  
 725 730 735

Met His Pro Ser Met Asn Gln Ser Ser Ile Ala Gln Asp Arg Gly Tyr  
 740 745 750

Met Gln Arg Asn Pro Gln Met Pro Gln Tyr Ser Ser Pro Gln Pro Gly  
 755 760 765

Ser Ala Leu Ser Pro Arg Gln Pro Ser Gly Gly Gln Ile His Thr Gly  
 770 775 780

Met Gly Ser Tyr Gln Gln Asn Ser Met Gly Ser Tyr Gly Pro Gln Gly  
 785 790 795 800

Gly Gln Tyr Gly Pro Gln Gly Gly Tyr Pro Arg Gln Pro Asn Tyr Asn  
 805 810 815

Ala Leu Pro Asn Ala Asn Tyr Pro Ser Ala Gly Met Ala Gly Gly Ile  
 820 825 830

Asn Pro Met Gly Ala Gly Gly Gln Met His Gly Gln Pro Gly Ile Pro  
 835 840 845

Pro Tyr Gly Thr Leu Pro Pro Gly Arg Met Ser His Ala Ser Met Gly  
 850 855 860

Asn Arg Pro Tyr Gly Pro Asn Met Ala Asn Met Pro Pro Gln Val Gly  
 865 870 875 880

Ser Gly Met Cys Pro Pro Pro Gly Gly Met Asn Arg Lys Thr Gln Glu  
 885 890 895

Thr Ala Val Ala Met His Val Ala Ala Asn Ser Ile Gln Asn Arg Pro  
 900 905 910

Pro Gly Tyr Pro Asn Met Asn Gln Gly Gly Met Met Gly Thr Gly Pro  
 915 920 925

Pro Tyr Gly Gln Gly Ile Asn Ser Met Ala Gly Met Ile Asn Pro Gln  
 930 935 940

Gly Pro Pro Tyr Ser Met Gly Gly Thr Met Ala Asn Asn Ser Ala Gly  
 945 950 955 960

Met Ala Ala Ser Pro Glu Met Met Gly Leu Gly Asp Val Lys Leu Thr  
 965 970 975

Pro Ala Thr Lys Met Asn Asn Lys Ala Asp Gly Thr Pro Lys Thr Glu  
 980 985 990

Ser Lys Ser Lys Lys Ser Ser Ser Thr Thr Thr Asn Glu Lys Ile  
 995 1000 1005

Thr Lys Leu Tyr Glu Leu Gly Gly Glu Pro Glu Arg Lys Met Trp  
 1010 1015 1020

Val Asp Arg Tyr Leu Ala Phe Thr Glu Glu Lys Ala Met Gly Met  
 1025 1030 1035

Thr Asn Leu Pro Ala Val Gly Arg Lys Pro Leu Asp Leu Tyr Arg  
 1040 1045 1050

Leu Tyr Val Ser Val Lys Glu Ile Gly Gly Leu Thr Gln Val Asn  
 1055 1060 1065

Lys Asn Lys Lys Trp Arg Glu Leu Ala Thr Asn Leu Asn Val Gly  
 1070 1075 1080

Thr Ser Ser Ser Ala Ala Ser Ser Leu Lys Lys Gln Tyr Ile Gln  
 1085 1090 1095

Cys Leu Tyr Ala Phe Glu Cys Lys Ile Glu Arg Gly Glu Asp Pro  
 1100 1105 1110

Pro Pro Asp Ile Phe Ala Ala Ala Asp Ser Lys Lys Ser Gln Pro  
 1115 1120 1125

Lys Ile Gln Pro Pro Ser Pro Ala Gly Ser Gly Ser Met Gln Gly  
 1130 1135 1140

Pro Gln Thr Pro Gln Ser Thr Ser Ser Ser Met Ala Glu Gly Gly  
 1145 1150 1155

Asp Leu Lys Pro Pro Thr Pro Ala Ser Thr Pro His Ser Gln Ile  
 1160 1165 1170

Pro Pro Leu Pro Gly Met Ser Arg Ser Asn Ser Val Gly Ile Gln  
 1175 1180 1185

Asp Ala Phe Asn Asp Gly Ser Asp Ser Thr Phe Gln Lys Arg Asn  
 1190 1195 1200

Ser Met Thr Pro Asn Pro Gly Tyr Gln Pro Ser Met Asn Thr Ser  
 1205 1210 1215

Asp Met Met Gly Arg Met Ser Tyr Glu Pro Asn Lys Asp Pro Tyr  
 1220 1225 1230

Gly Ser Met Arg Lys Ala Pro Gly Ser Asp Pro Phe Met Ser Ser  
 1235 1240 1245

Gly Gln Gly Pro Asn Gly Gly Met Gly Asp Pro Tyr Ser Arg Ala  
 1250 1255 1260

Ala Gly Pro Gly Leu Gly Asn Val Ala Met Gly Pro Arg Gln His  
 1265 1270 1275

Tyr Pro Tyr Gly Gly Pro Tyr Asp Arg Val Arg Thr Glu Pro Gly  
 1280 1285 1290

Ile Gly Pro Glu Gly Asn Met Ser Thr Gly Ala Pro Gln Pro Asn  
 1295 1300 1305

Leu Met Pro Ser Asn Pro Asp Ser Gly Met Tyr Ser Pro Ser Arg  
 1310 1315 1320

Tyr Pro Pro Gln Gln Gln Gln Gln Gln Gln Arg His Asp Ser  
 1325 1330 1335

Tyr Gly Asn Gln Phe Ser Thr Gln Gly Thr Pro Ser Gly Ser Pro  
 1340 1345 1350

Phe Pro Ser Gln Gln Thr Thr Met Tyr Gln Gln Gln Gln Gln Asn  
 1355 1360 1365

Tyr Lys Arg Pro Met Asp Gly Thr Tyr Gly Pro Pro Ala Lys Arg  
 1370 1375 1380

His Glu Gly Glu Met Tyr Ser Val Pro Tyr Ser Thr Gly Gln Gly  
 1385 1390 1395

Gln Pro Gln Gln Gln Gln Leu Pro Pro Ala Gln Pro Gln Pro Ala  
 1400 1405 1410

Ser Gln Gln Gln Ala Ala Gln Pro Ser Pro Gln Gln Asp Val Tyr  
 1415 1420 1425

Asn Gln Tyr Gly Asn Ala Tyr Pro Ala Thr Ala Thr Ala Ala Thr  
 1430 1435 1440

Glu Arg Arg Pro Ala Gly Gly Pro Gln Asn Gln Phe Pro Phe Gln  
 1445 1450 1455

Phe Gly Arg Asp Arg Val Ser Ala Pro Pro Gly Thr Asn Ala Gln  
 1460 1465 1470

Gln Asn Met Pro Pro Gln Met Met Gly Gly Pro Ile Gln Ala Ser  
 1475 1480 1485

Ala Glu Val Ala Gln Gln Gly Thr Met Trp Gln Gly Arg Asn Asp  
 1490 1495 1500

Met Thr Tyr Asn Tyr Ala Asn Arg Gln Ser Thr Gly Ser Ala Pro  
 1505 1510 1515

Gln Gly Pro Ala Tyr His Gly Val Asn Arg Thr Asp Glu Met Leu  
 1520 1525 1530

His Thr Asp Gln Arg Ala Asn His Glu Gly Ser Trp Pro Ser His  
 1535 1540 1545

Gly Thr Arg Gln Pro Pro Tyr Gly Pro Ser Ala Pro Val Pro Pro  
 1550 1555 1560

Met Thr Arg Pro Pro Pro Ser Asn Tyr Gln Pro Pro Pro Ser Met  
 1565 1570 1575

Gln Asn His Ile Pro Gln Val Ser Ser Pro Ala Pro Leu Pro Arg  
 1580 1585 1590

Pro Met Glu Asn Arg Thr Ser Pro Ser Lys Ser Pro Phe Leu His  
 1595 1600 1605

Ser Gly Met Lys Met Gln Lys Ala Gly Pro Pro Val Pro Ala Ser  
 1610 1615 1620

His Ile Ala Pro Ala Pro Val Gln Pro Pro Met Ile Arg Arg Asp  
 1625 1630 1635

Ile Thr Phe Pro Pro Gly Ser Val Glu Ala Thr Gln Pro Val Leu  
 1640 1645 1650

Lys Gln Arg Arg Arg Leu Thr Met Lys Asp Ile Gly Thr Pro Glu  
 1655 1660 1665

Ala Trp Arg Val Met Met Ser Leu Lys Ser Gly Leu Leu Ala Glu  
 1670 1675 1680

Ser Thr Trp Ala Leu Asp Thr Ile Asn Ile Leu Leu Tyr Asp Asp  
 1685 1690 1695

Asn Ser Ile Met Thr Phe Asn Leu Ser Gln Leu Pro Gly Leu Leu  
 1700 1705 1710

Glu Leu Leu Val Glu Tyr Phe Arg Arg Cys Leu Ile Glu Ile Phe  
 1715 1720 1725

Gly Ile Leu Lys Glu Tyr Glu Val Gly Asp Pro Gly Gln Arg Thr  
 1730 1735 1740

Leu Leu Asp Pro Gly Arg Phe Ser Lys Val Ser Ser Pro Ala Pro  
 1745 1750 1755

Met Glu Gly Gly Glu Glu Glu Glu Leu Leu Gly Pro Lys Leu  
 1760 1765 1770

Glu Glu Glu Glu Glu Glu Val Val Glu Asn Asp Glu Glu Ile  
 1775 1780 1785

Ala Phe Ser Gly Lys Asp Lys Pro Ala Ser Glu Asn Ser Glu Glu  
 1790 1795 1800

Lys Leu Ile Ser Lys Phe Asp Lys Leu Pro Val Lys Ile Val Gln  
 1805 1810 1815

Lys Asn Asp Pro Phe Val Val Asp Cys Ser Asp Lys Leu Gly Arg  
 1820 1825 1830

Val Gln Glu Phe Asp Ser Gly Leu Leu His Trp Arg Ile Gly Gly  
 1835 1840 1845

Gly Asp Thr Thr Glu His Ile Gln Thr His Phe Glu Ser Lys Thr  
 1850 1855 1860

Glu Leu Leu Pro Ser Arg Pro His Ala Pro Cys Pro Pro Ala Pro  
 1865 1870 1875

Arg Lys His Val Thr Thr Ala Glu Gly Thr Pro Gly Thr Thr Asp  
 1880 1885 1890

Gln Glu Gly Pro Pro Pro Asp Gly Pro Pro Glu Lys Arg Ile Thr  
 1895 1900 1905

Ala Thr Met Asp Asp Met Leu Ser Thr Arg Ser Ser Thr Leu Thr  
 1910 1915 1920

Glu Asp Gly Ala Lys Ser Ser Glu Ala Ile Lys Glu Ser Ser Lys  
 1925 1930 1935

Phe Pro Phe Gly Ile Ser Pro Ala Gln Ser His Arg Asn Ile Lys  
 1940 1945 1950

Ile Leu Glu Asp Glu Pro His Ser Lys Asp Glu Thr Pro Leu Cys  
 1955 1960 1965

Thr Leu Leu Asp Trp Gln Asp Ser Leu Ala Lys Arg Cys Val Cys  
 1970 1975 1980

Val Ser Asn Thr Ile Arg Ser Leu Ser Phe Val Pro Gly Asn Asp  
 1985 1990 1995

Phe Glu Met Ser Lys His Pro Gly Leu Leu Leu Ile Leu Gly Lys  
 2000 2005 2010

Leu Ile Leu Leu His His Lys His Pro Glu Arg Lys Gln Ala Pro  
 2015 2020 2025

Leu Thr Tyr Glu Lys Glu Glu Gln Asp Gln Gly Val Ser Cys  
 2030 2035 2040

Asn Lys Val Glu Trp Trp Trp Asp Cys Leu Glu Met Leu Arg Glu  
 2045 2050 2055

Asn Thr Leu Val Thr Leu Ala Asn Ile Ser Gly Gln Leu Asp Leu  
 2060 2065 2070

Ser Pro Tyr Pro Glu Ser Ile Cys Leu Pro Val Leu Asp Gly Leu  
 2075 2080 2085

Leu His Trp Ala Val Cys Pro Ser Ala Glu Ala Gln Asp Pro Phe  
 2090 2095 2100

Ser Thr Leu Gly Pro Asn Ala Val Leu Ser Pro Gln Arg Leu Val  
 2105 2110 2115

Leu Glu Thr Leu Ser Lys Leu Ser Ile Gln Asp Asn Asn Val Asp  
 2120 2125 2130

Leu Ile Leu Ala Thr Pro Pro Phe Ser Arg Leu Glu Lys Leu Tyr  
 2135 2140 2145

Ser Thr Met Val Arg Phe Leu Ser Asp Arg Lys Asn Pro Val Cys  
 2150 2155 2160

Arg Glu Met Ala Val Val Leu Leu Ala Asn Leu Ala Gln Gly Asp  
 2165 2170 2175

Ser Leu Ala Ala Arg Ala Ile Ala Val Gln Lys Gly Ser Ile Gly  
 2180 2185 2190

Asn Leu Leu Gly Phe Leu Glu Asp Ser Leu Ala Ala Thr Gln Phe  
 2195 2200 2205

Gln Gln Ser Gln Ala Ser Leu Leu His Met Gln Asn Pro Pro Phe  
 2210 2215 2220

Glu Pro Thr Ser Val Asp Met Met Arg Arg Ala Ala Arg Ala Leu  
 2225 2230 2235

Leu Ala Leu Ala Lys Val Asp Glu Asn His Ser Glu Phe Thr Leu  
 2240 2245 2250

Tyr Glu Ser Arg Leu Leu Asp Ile Ser Val Ser Pro Leu Met Asn  
 2255 2260 2265

Ser Leu Val Ser Gln Val Ile Cys Asp Val Leu Phe Leu Ile Gly  
 2270 2275 2280

Gln Ser  
 2285

<210> 102  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 102  
 Met Ala Thr Gln Ala Arg Gln Glu Thr Cys Asp Asn Thr Lys Trp Asn  
 1 5 10 15

Ser His Tyr Ala Arg Ser Cys Asp His His Gln Tyr His Pro Gln Arg  
 20 25 30

Ser Tyr Lys Ala Lys Ala His Lys Gly Ala Pro Gly Gly Arg Trp Cys  
 35 40 45

Val Gln Gly Val Gly Trp His Val Cys Val Gly Ala His Cys His Gly  
 50 55 60

Ala Ser Ile Ser Lys Asn Ser Ser Arg Glu Val Cys Ala Glu Ile Leu  
 65 70 75 80

Ala Cys Ile Pro Lys Ala His Ala  
 85

<210> 103  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<400> 103  
 Met Pro Tyr Asp Ser Val Arg Ile Glu Arg Arg Met Arg Cys Phe Lys  
 1 5 10 15

Ser Lys Ser Gln Leu Leu Asp Ser Gln Val Phe Lys Tyr Gly His Thr  
 20 25 30

Pro Tyr Leu Val Leu Asp Tyr Met Gly Tyr Glu Gln Gly Ile Glu Thr  
 35 40 45

Asp Lys Ile Val Phe Thr Asp Thr Val Tyr Arg Phe Phe Pro Phe  
 50 55 60

Met Gln Leu Phe Ser  
 65

<210> 104  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<400> 104  
 Met Cys Phe Asn Phe Lys Met Leu Asn Ser Phe Gln Thr Trp Tyr Leu  
 1 5 10 15

Ile Tyr Ser Pro Phe Leu Ala Phe Val Glu Phe Gln Ala Glu Cys Leu  
 20 25 30

Thr Asp Cys Pro Arg Thr Arg Leu Ser Phe Asn Leu Lys Gln Leu Arg  
 35 40 45

Lys Gly Gln Arg Arg Tyr Lys Gly Lys Ala Ala Gln Asn Arg Ser Gly  
 50 55 60

Glu  
 65

<210> 105  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 105

Met	Leu	Gly	Ala	Val	Ile	Thr	Thr	Asn	Ile	Thr	Pro	Arg	Gly	Val	Ile
1				5					10						15

Lys	Pro	Arg	Arg	Thr	Arg	Gly	Pro	Leu	Val	Ala	Gly	Gly	Val	Cys	Arg
				20				25						30	

Gly	Leu	Gly	Gly	Thr	Ser	Val	Leu	Val	Pro	Thr	Val	Thr	Val	Gln	Ala
				35			40				45				

Ser	Ala	Arg	Thr	Gln	Ala	Gly	Lys	Ser	Val	Leu	Lys	Tyr			
				50			55				60				

&lt;210&gt; 106

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 106

Met	Cys	Asn	Phe	Phe	Lys	Tyr	Val	Phe	Tyr	Ser	Tyr	Gly	Leu	Leu	Val
1				5				10						15	

Ser	Glu	Pro	Asp	Leu	Leu	Thr	Ile	Phe	Leu	Tyr	Asn	Asn	Ala	Ser	His
				20				25						30	

Phe	Leu	Asp	Ser	Leu	Val	Met	Cys	Cys	Met	Gln	Glu	Leu	Ser	Ser	Ser
				35			40				45				

Ser	Glu	Gly	Gly	Leu	Pro	Leu	Gln	Ala	Ser						
				50			55								

&lt;210&gt; 107

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 107

Met	Leu	Lys	Lys	Lys	Asn	Phe	Phe	Leu	Val	Glu	Met	Gln	Ser	Pro	Val
1				5				10						15	

Lys	Arg	Tyr	Glu	Lys	Ala	Ser	Leu	Ser	Gln	Arg	Pro	Gly	Arg	Gln	Ser
				20				25					30		

Thr	Thr	Arg	Gly	Ser	Glu	Val	Leu	Met	Glu	Ser	Cys	Leu	Ser	Asn	Glu
				35				40				45			

Val Leu Lys Arg Met Pro Lys  
50 55

<210> 108  
<211> 50  
<212> PRT  
<213> Homo sapiens

<400> 108  
Met Leu Gln Ile Arg Lys Leu Leu Leu Gly Thr Cys Asp Thr His Ser  
1 5 10 15

Glu Cys Asp Met Val Ala Asn Gly Trp Pro Val Leu Lys Ala Gly Ser  
20 25 30

Gln His Lys Gly Gln Arg Ala Leu Ala Ala Pro Leu Pro Thr Ser Glu  
35 40 45

Pro Gly  
50

<210> 109  
<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 109  
Met Arg His His Leu Phe Tyr Lys Leu Asp Tyr Gly Phe Lys Trp Asn  
1 5 10 15

Thr Gln Gly Asn Ile Tyr Lys His Gln Gly Lys Leu Ser Thr Ala Ser  
20 25 30

Leu Phe His Leu Glu Arg Gly Arg Phe Pro Asn Gln Thr Gly Phe Asp  
35 40 45

Pro

<210> 110  
<211> 48  
<212> PRT  
<213> Homo sapiens

<400> 110  
Met Pro Val His Ser Ser Leu Gly Asn Lys Ser Glu Thr Pro Cys Gln  
1 5 10 15

Lys Lys Lys Lys Lys Met Leu Leu Ile Leu Ser Glu Ser Lys Lys Glu  
 20 25 30

Thr Leu Thr Ala Leu Asn Ser Gly Phe Ile Phe Leu Ala Val Phe Gly  
 35 40 45

<210> 111  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<400> 111  
 Met Arg Ser Trp Asp Leu Leu Phe Ser Pro Gly Leu Gln Asn Leu Ile  
 1 5 10 15

Pro Val Thr Lys Ala Arg Lys Glu Leu Tyr His Lys Pro Ser Leu Ser  
 20 25 30

Trp His Glu Asn Trp Leu Pro Gly Ser Val Tyr Pro Ile Asn Cys Glu  
 35 40 45

<210> 112  
 <211> 45  
 <212> PRT  
 <213> Homo sapiens

<400> 112  
 Met Ile Gly His Glu Ala Ser Cys His Thr Pro Glu Ile Arg Val Arg  
 1 5 10 15

Leu Leu Leu Arg Thr Met Cys Leu Val Thr Tyr Phe Ser Lys Ile Ile  
 20 25 30

Ser Leu Pro Gly Asn Gln Ser Ser Leu Val Tyr Leu Ser  
 35 40 45

<210> 113  
 <211> 45  
 <212> PRT  
 <213> Homo sapiens

<400> 113  
 Met Phe Ile Ile Phe Ile Phe Lys Val Cys Val Ile Phe Leu Ser Met  
 1 5 10 15

Tyr Ser Ile His Met Val Cys Leu Ser Val Ser Gln Thr Cys Leu Leu  
 20 25 30

Tyr Ser Phe Ile Ile Met Leu Ala Thr Ser Trp Ile Leu  
 35 40 45

<210> 114  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<400> 114  
 Met Arg Thr Gly Cys Gln Ala Gln Cys Thr Pro Leu Thr Val Asn Glu  
 1 5 10 15

Ser Glu Leu Gly Phe Leu Tyr Cys Phe Leu Cys Asn Met Ile Ala Glu  
 20 25 30

Thr His Phe Lys Asn Ser Glu Ala Cys His Ser Cys  
 35 40

<210> 115  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 115  
 Val Met Ala Tyr Tyr Ser Gly Gln Val Cys Pro Ala Gln Gly Val Ile  
 1 5 10 15

Ser Gly Gly Phe Gln Thr Cys Thr Gln Phe Lys Asp Gly Gly Asp Arg  
 20 25 30

Leu Cys Leu Tyr Leu Val Asn Pro Thr  
 35 40

<210> 116  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 116  
 Met Ile Ser Ala His Cys Asp Leu Arg Leu Leu Gly Ser Ser Asp Ser  
 1 5 10 15

Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Arg His His  
 20 25 30

Ala Arg Leu Ile Leu Tyr Phe  
35

<210> 117  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 117  
Met Glu Asp Phe Phe Leu Thr Ala Leu Phe Phe Met Ala Phe Ser Lys  
1 5 10 15

Arg Phe Lys Cys Ser Leu Phe Phe Lys Trp Gly Ser Leu Gly Arg Gly  
20 25 30

Lys Val Cys Pro His His Leu  
35

<210> 118  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 118  
Met Leu Glu Ala Leu Trp Asn Ser Pro Ile Pro Pro Pro Phe Tyr Ile  
1 5 10 15

Ser Leu Pro Thr Leu Ala Pro Met Leu Leu Val Pro Leu Gln Cys Ile  
20 25 30

Pro Thr Gln Gly Ser Ile Pro  
35

<210> 119  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 119  
Met Tyr Ser Thr Lys Met Glu Pro Tyr Ala Trp Ala Leu Gly Ile Gln  
1 5 10 15

Ala Ser Ile Ser Ala Gln Thr Ser Leu Leu Glu Phe Leu Leu Met Leu  
20 25 30

Ala Pro

&lt;210&gt; 120

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 120

Met Val Ser Ser Pro Gln Gly Gly Glu Ala Thr His Thr Met Leu Lys  
1 5 10 15Ile Asn Thr Lys Asn Lys His Lys Val Arg Leu Val Leu His Met Cys  
20 25 30

Asp

&lt;210&gt; 121

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 121

Asn Asp Ile Phe Leu Val Ala Val His Glu Leu Gly His Ala Leu Gly  
1 5 10 15Leu Glu His Ser Ser Asp Pro Ser Ala Ile Met Ala Pro Phe Tyr Gln  
20 25 30Trp Met Asp Thr Glu Asn Phe Val Leu Pro Asp Asp Asp Arg Arg Gly  
35 40 45Ile Gln Gln Leu Tyr  
50

&lt;210&gt; 122

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 122

Met Ser Pro Ala Pro Arg Pro Ser Arg Cys Leu Leu Leu Pro Leu Leu  
1 5 10 15Thr Leu Gly Thr Ala Leu Ala Ser Leu Gly Ser Ala Gln Ser Ser Ser  
20 25 30

Phe Ser Pro Glu Ala Trp Leu Gln Gln Tyr Gly Tyr Leu Pro Pro Gly  
 35 40 45

Asp Leu Arg Thr His Thr Gln Arg Ser Pro Gln Ser Leu Ser Ala Ala  
50 55 60

Ile Ala Ala Met Gln Lys Phe Tyr Gly Leu Gln Val Thr Gly Lys Ala  
65 70 75 80

Asp Ala Asp Thr Met Lys Ala Met Arg Arg Pro Arg Cys Gly Val Pro  
                   85                  90                  95

Asp Lys Phe Gly Ala Glu Ile Lys Ala Asn Val Arg Arg Lys Arg Tyr  
100 105 110

Ala Ile Gln Gly Leu Lys Trp Gln His Asn Glu Ile Thr Phe Cys Ile  
115 120 125

Gln Asn Tyr Thr Pro Lys Val Gly Glu Tyr Ala Thr Tyr Glu Ala Ile  
 130 135 140

Arg Lys Ala Phe Arg Val Trp Glu Ser Ala Thr Pro Leu Arg Phe Arg  
145 150 155 160

Glu Val Pro Tyr Ala Tyr Ile Arg Glu Gly His Glu Lys Gln Ala Asp  
165 170 175

Ile Met Ile Phe Phe Ala Glu Gly Phe His Gly Asp Ser Thr Pro Phe  
180 185 190

Asp Gly Glu Gly Gly Phe Leu Ala His Ala Tyr Phe Pro Gly Pro Asn  
 195 200 205

Ile Gly Gly Asp Thr His Phe Asp Ser Ala Glu Pro Trp Thr Val Arg  
210 215 220

Asn	Glu	Asp	Leu	Asn	Gly	Asn	Asp	Ile	Phe	Leu	Val	Ala	Val	His	Glu
225				230					235					240	

Leu Gly His Ala Leu Gly Leu Glu His Ser Ser Asp Pro Ser Ala Ile  
245 250 255

Met Ala Pro Gly  
260

<210> 123  
<211> 53  
<212> PRT  
<213> Homo sapiens

<400> 123  
Asn Asp Ile Phe Leu Val Ala Val His Glu Leu Gly His Ala Leu Gly  
1 5 10 15

Leu Glu His Ser Ser Asp Pro Ser Ala Ile Met Ala Pro Phe Tyr Gln  
20 25 30

Trp Met Asp Thr Glu Asn Phe Val Leu Pro Asn Asp Asp Arg Arg Gly  
35 40 45

Ile Gln Gln Leu Tyr  
50

<210> 124  
<211> 2273  
<212> PRT  
<213> Homo sapiens

<400> 124  
Met Gly Phe Val Arg Gln Ile Gln Leu Leu Leu Trp Lys Asn Trp Thr  
1 5 10 15

Leu Arg Lys Arg Gln Lys Ile Arg Phe Val Val Glu Leu Val Trp Pro  
20 25 30

Leu Ser Leu Phe Leu Val Leu Ile Trp Leu Arg Asn Ala Asn Pro Leu  
35 40 45

Tyr Ser His His Glu Cys His Phe Pro Asn Lys Ala Met Pro Ser Ala  
50 55 60

Gly Met Leu Pro Trp Leu Gln Gly Ile Phe Cys Asn Val Asn Asn Pro  
65 70 75 80

Cys Phe Gln Ser Pro Thr Pro Gly Glu Ser Pro Gly Ile Val Ser Asn  
85 90 95

Tyr Asn Asn Ser Ile Leu Ala Arg Val Tyr Arg Asp Phe Gln Glu Leu  
100 105 110

Leu Met Asn Ala Pro Glu Ser Gln His Leu Gly Arg Ile Trp Thr Glu  
115 120 125

Leu His Ile Leu Ser Gln Phe Met Asp Thr Leu Arg Thr His Pro Glu  
130 135 140

Arg Ile Ala Gly Arg Gly Ile Arg Ile Arg Asp Ile Leu Lys Asp Glu  
145 150 155 160

Glu Thr Leu Thr Leu Phe Leu Ile Lys Asn Ile Gly Leu Ser Asp Ser  
165 170 175

Val Val Tyr Leu Leu Ile Asn Ser Gln Val Arg Pro Glu Gln Phe Ala  
180 185 190

His Gly Val Pro Asp Leu Ala Leu Lys Asp Ile Ala Cys Ser Glu Ala  
195 200 205

Leu Leu Glu Arg Phe Ile Ile Phe Ser Gln Arg Arg Gly Ala Lys Thr  
210 215 220

Val Arg Tyr Ala Leu Cys Ser Leu Ser Gln Gly Thr Leu Gln Trp Ile  
225 230 235 240

Glu Asp Thr Leu Tyr Ala Asn Val Asp Phe Phe Lys Leu Phe Arg Val  
245 250 255

Leu Pro Thr Leu Leu Asp Ser Arg Ser Gln Gly Ile Asn Leu Arg Ser  
260 265 270

Trp Gly Gly Ile Leu Ser Asp Met Ser Pro Arg Ile Gln Glu Phe Ile  
275 280 285

His Arg Pro Ser Met Gln Asp Leu Leu Trp Val Thr Arg Pro Leu Met  
290 295 300

Gln Asn Gly Gly Pro Glu Thr Phe Thr Lys Leu Met Gly Ile Leu Ser  
305 310 315 320

Asp Leu Leu Cys Gly Tyr Pro Glu Gly Gly Ser Arg Val Leu Ser  
 325 330 335

Phe Asn Trp Tyr Glu Asp Asn Asn Tyr Lys Ala Phe Leu Gly Ile Asp  
 340 345 350

Ser Thr Arg Lys Asp Pro Ile Tyr Ser Tyr Asp Arg Arg Thr Thr Ser  
 355 360 365

Phe Cys Asn Ala Leu Ile Gln Ser Leu Glu Ser Asn Pro Leu Thr Lys  
 370 375 380

Ile Ala Trp Arg Ala Ala Lys Pro Leu Leu Met Gly Lys Ile Leu Tyr  
 385 390 395 400

Thr Pro Asp Ser Pro Ala Ala Arg Arg Ile Leu Lys Asn Ala Asn Ser  
 405 410 415

Thr Phe Glu Glu Leu Glu His Val Arg Lys Leu Val Lys Ala Trp Glu  
 420 425 430

Glu Val Gly Pro Gln Ile Trp Tyr Phe Phe Asp Asn Ser Thr Gln Met  
 435 440 445

Asn Met Ile Arg Asp Thr Leu Gly Asn Pro Thr Val Lys Asp Phe Leu  
 450 455 460

Asn Arg Gln Leu Gly Glu Glu Gly Ile Thr Ala Glu Ala Ile Leu Asn  
 465 470 475 480

Phe Leu Tyr Lys Gly Pro Arg Glu Ser Gln Ala Asp Asp Met Ala Asn  
 485 490 495

Phe Asp Trp Arg Asp Ile Phe Asn Ile Thr Asp Arg Thr Leu Arg Leu  
 500 505 510

Val Asn Gln Tyr Leu Glu Cys Leu Val Leu Asp Lys Phe Glu Ser Tyr  
 515 520 525

Asn Asp Glu Thr Gln Leu Thr Gln Arg Ala Leu Ser Leu Leu Glu Glu  
 530 535 540

Asn Met Phe Trp Ala Gly Val Val Phe Pro Asp Met Tyr Pro Trp Thr  
 545 550 555 560

Ser Ser Leu Pro Pro His Val Lys Tyr Lys Ile Arg Met Asp Ile Asp  
 565 570 575

Val Val Glu Lys Thr Asn Lys Ile Lys Asp Arg Tyr Trp Asp Ser Gly  
 580 585 590

Pro Arg Ala Asp Pro Val Glu Asp Phe Arg Tyr Ile Trp Gly Gly Phe  
 595 600 605

Ala Tyr Leu Gln Asp Met Val Glu Gln Gly Ile Thr Arg Ser Gln Val  
 610 615 620

Gln Ala Glu Ala Pro Val Gly Ile Tyr Leu Gln Gln Met Pro Tyr Pro  
 625 630 635 640

Cys Phe Val Asp Asp Ser Phe Met Ile Ile Leu Asn Arg Cys Phe Pro  
 645 650 655

Ile Phe Met Val Leu Ala Trp Ile Tyr Ser Val Ser Met Thr Val Lys  
 660 665 670

Ser Ile Val Leu Glu Lys Glu Leu Arg Leu Lys Glu Thr Leu Lys Asn  
 675 680 685

Gln Gly Val Ser Asn Ala Val Ile Trp Cys Thr Trp Phe Leu Asp Ser  
 690 695 700

Phe Ser Ile Met Ser Met Ser Ile Phe Leu Leu Thr Ile Phe Ile Met  
 705 710 715 720

His Gly Arg Ile Leu His Tyr Ser Asp Pro Phe Ile Leu Phe Leu Phe  
 725 730 735

Leu Leu Ala Phe Ser Thr Ala Thr Ile Met Leu Cys Phe Leu Leu Ser  
 740 745 750

Thr Phe Phe Ser Lys Ala Ser Leu Ala Ala Ala Cys Ser Gly Val Ile  
 755 760 765

Tyr Phe Thr Leu Tyr Leu Pro His Ile Leu Cys Phe Ala Trp Gln Asp  
 770 775 780

Arg Met Thr Ala Glu Leu Lys Lys Ala Val Ser Leu Leu Ser Pro Val  
 785 790 795 800

Ala Phe Gly Phe Gly Thr Glu Tyr Leu Val Arg Phe Glu Glu Gln Gly  
 805 810 815

Leu Gly Leu Gln Trp Ser Asn Ile Gly Asn Ser Pro Thr Glu Gly Asp  
 820 825 830

Glu Phe Ser Phe Leu Leu Ser Met Gln Met Met Leu Leu Asp Ala Ala  
 835 840 845

Cys Tyr Gly Leu Leu Ala Trp Tyr Leu Asp Gln Val Phe Pro Gly Asp  
 850 855 860

Tyr Gly Thr Pro Leu Pro Trp Tyr Phe Leu Leu Gln Glu Ser Tyr Trp  
 865 870 875 880

Leu Ser Gly Glu Gly Cys Ser Thr Arg Glu Glu Arg Ala Leu Glu Lys  
 885 890 895

Thr Glu Pro Leu Thr Glu Glu Thr Glu Asp Pro Glu His Pro Glu Gly  
 900 905 910

Ile His Asp Ser Phe Phe Glu Arg Glu His Pro Gly Trp Val Pro Gly  
 915 920 925

Val Cys Val Lys Asn Leu Val Lys Ile Phe Glu Pro Cys Gly Arg Pro  
 930 935 940

Ala Val Asp Arg Leu Asn Ile Thr Phe Tyr Glu Asn Gln Ile Thr Ala  
 945 950 955 960

Phe Leu Gly His Asn Gly Ala Gly Lys Thr Thr Thr Leu Ser Ile Leu  
 965 970 975

Thr Gly Leu Leu Pro Pro Thr Ser Gly Thr Val Leu Val Gly Gly Arg  
 980 985 990

Asp Ile Glu Thr Ser Leu Asp Ala Val Arg Gln Ser Leu Gly Met Cys  
 995 1000 1005

Pro Gln His Asn Ile Leu Phe His His Leu Thr Val Ala Glu His  
 1010 1015 1020

Met Leu Phe Tyr Ala Gln Leu Lys Gly Lys Ser Gln Glu Glu Ala  
 1025 1030 1035

Gln Leu Glu Met Glu Ala Met Leu Glu Asp Thr Gly Leu His His  
 1040 1045 1050

Lys Arg Asn Glu Glu Ala Gln Asp Leu Ser Gly Gly Met Gln Arg  
 1055 1060 1065

Lys Leu Ser Val Ala Ile Ala Phe Val Gly Asp Ala Lys Val Val  
 1070 1075 1080

Ile Leu Asp Glu Pro Thr Ser Gly Val Asp Pro Tyr Ser Arg Arg  
 1085 1090 1095

Ser Ile Trp Asp Leu Leu Leu Lys Tyr Arg Ser Gly Arg Thr Ile  
 1100 1105 1110

Ile Met Pro Thr His His Met Asp Glu Ala Asp His Gln Gly Asp  
 1115 1120 1125

Arg Ile Ala Ile Ile Ala Gln Gly Arg Leu Tyr Cys Ser Gly Thr  
 1130 1135 1140

Pro Leu Phe Leu Lys Asn Cys Phe Gly Thr Gly Leu Tyr Leu Thr  
 1145 1150 1155

Leu Val Arg Lys Met Lys Asn Ile Gln Ser Gln Arg Lys Gly Ser  
 1160 1165 1170

Glu Gly Thr Cys Ser Cys Ser Ser Lys Gly Phe Ser Thr Thr Cys  
 1175 1180 1185

Pro Ala His Val Asp Asp Leu Thr Pro Glu Gln Val Leu Asp Gly  
 1190 1195 1200

Asp Val Asn Glu Leu Met Asp Val Val Leu His His Val Pro Glu  
 1205 1210 1215

Ala Lys Leu Val Glu Cys Ile Gly Gln Glu Leu Ile Phe Leu Leu  
 1220 1225 1230

Pro Asn Lys Asn Phe Lys His Arg Ala Tyr Ala Ser Leu Phe Arg  
 1235 1240 1245

Glu Leu Glu Glu Thr Leu Ala Asp Leu Gly Leu Ser Ser Phe Gly  
 1250 1255 1260

Ile Ser Asp Thr Pro Leu Glu Glu Ile Phe Leu Lys Val Thr Glu  
 1265 1270 1275

Asp Ser Asp Ser Gly Pro Leu Phe Ala Gly Gly Ala Gln Gln Lys  
 1280 1285 1290

Arg Glu Asn Val Asn Pro Arg His Pro Cys Leu Gly Pro Arg Glu  
 1295 1300 1305

Lys Ala Gly Gln Thr Pro Gln Asp Ser Asn Val Cys Ser Pro Gly  
 1310 1315 1320

Ala Pro Ala Ala His Pro Glu Gly Gln Pro Pro Pro Glu Pro Glu  
 1325 1330 1335

Cys Pro Gly Pro Gln Leu Asn Thr Gly Thr Gln Leu Val Leu Gln  
 1340 1345 1350

His Val Gln Ala Leu Leu Val Lys Arg Phe Gln His Thr Ile Arg  
 1355 1360 1365

Ser His Lys Asp Phe Leu Ala Gln Ile Val Leu Pro Ala Thr Phe  
 1370 1375 1380

Val Phe Leu Ala Leu Met Leu Ser Ile Val Ile Leu Pro Phe Gly  
 1385 1390 1395

Glu Tyr Pro Ala Leu Thr Leu His Pro Trp Ile Tyr Gly Gln Gln  
 1400 1405 1410

Tyr Thr Phe Phe Ser Met Asp Glu Pro Gly Ser Glu Gln Phe Thr  
 1415 1420 1425

Val Leu Ala Asp Val Leu Leu Asn Lys Pro Gly Phe Gly Asn Arg  
 1430 1435 1440

Cys Leu Lys Glu Gly Trp Leu Pro Glu Tyr Pro Cys Gly Asn Ser  
 1445 1450 1455

Thr Pro Trp Lys Thr Pro Ser Val Ser Pro Asn Ile Thr Gln Leu  
 1460 1465 1470

Phe Gln Lys Gln Lys Trp Thr Gln Val Asn Pro Ser Pro Ser Cys  
 1475 1480 1485

Arg Cys Ser Thr Arg Glu Lys Leu Thr Met Leu Pro Glu Cys Pro  
 1490 1495 1500

Glu Gly Ala Gly Gly Leu Pro Pro Pro Gln Arg Thr Gln Arg Ser  
 1505 1510 1515

Thr Glu Ile Leu Gln Asp Leu Thr Asp Arg Asn Ile Ser Asp Phe  
 1520 1525 1530

Leu Val Lys Thr Tyr Pro Ala Leu Ile Arg Ser Ser Leu Lys Ser  
 1535 1540 1545

Lys Phe Trp Val Asn Glu Gln Arg Tyr Gly Gly Ile Ser Ile Gly  
 1550 1555 1560

Gly Lys Leu Pro Val Val Pro Ile Thr Gly Glu Ala Leu Val Gly  
 1565 1570 1575

Phe Leu Ser Asp Leu Gly Arg Ile Met Asn Val Ser Gly Gly Pro  
 1580 1585 1590

Ile Thr Arg Glu Ala Ser Lys Glu Ile Pro Asp Phe Leu Lys His  
 1595 1600 1605

Leu Glu Thr Glu Asp Asn Ile Lys Val Trp Phe Asn Asn Lys Gly  
 1610 1615 1620

Trp His Ala Leu Val Ser Phe Leu Asn Val Ala His Asn Ala Ile  
 1625 1630 1635

Leu Arg Ala Ser Leu Pro Lys Asp Arg Ser Pro Glu Glu Tyr Gly  
 1640 1645 1650

Ile Thr Val Ile Ser Gln Pro Leu Asn Leu Thr Lys Glu Gln Leu  
 1655 1660 1665

Ser Glu Ile Thr Val Leu Thr Thr Ser Val Asp Ala Val Val Ala  
 1670 1675 1680

Ile Cys Val Ile Phe Ser Met Ser Phe Val Pro Ala Ser Phe Val  
 1685 1690 1695

Leu Tyr Leu Ile Gln Glu Arg Val Asn Lys Ser Lys His Leu Gln  
 1700 1705 1710

Phe Ile Ser Gly Val Ser Pro Thr Thr Tyr Trp Val Thr Asn Phe  
 1715 1720 1725

Leu Trp Asp Ile Met Asn Tyr Ser Val Ser Ala Gly Leu Val Val  
 1730 1735 1740

Gly Ile Phe Ile Gly Phe Gln Lys Lys Ala Tyr Thr Ser Pro Glu  
 1745 1750 1755

Asn Leu Pro Ala Leu Val Ala Leu Leu Leu Leu Tyr Gly Trp Ala  
 1760 1765 1770

Val Ile Pro Met Met Tyr Pro Ala Ser Phe Leu Phe Asp Val Pro  
 1775 1780 1785

Ser Thr Ala Tyr Val Ala Leu Ser Cys Ala Asn Leu Phe Ile Gly  
 1790 1795 1800

Ile Asn Ser Ser Ala Ile Thr Phe Ile Leu Glu Leu Phe Asp Asn  
 1805 1810 1815

Asn Arg Thr Leu Leu Arg Phe Asn Ala Val Leu Arg Lys Leu Leu  
 1820 1825 1830

Ile Val Phe Pro His Phe Cys Leu Gly Arg Gly Leu Ile Asp Leu  
 1835 1840 1845

Ala Leu Ser Gln Ala Val Thr Asp Val Tyr Ala Arg Phe Gly Glu  
 1850 1855 1860

Glu His Ser Ala Asn Pro Phe His Trp Asp Leu Ile Gly Lys Asn  
 1865 1870 1875

Leu Phe Ala Met Val Val Glu Gly Val Val Tyr Phe Leu Leu Thr  
 1880 1885 1890

Leu Leu Val Gln Arg His Phe Phe Leu Ser Gln Trp Ile Ala Glu  
 1895 1900 1905

Pro Thr Lys Glu Pro Ile Val Asp Glu Asp Asp Asp Val Ala Glu  
 1910 1915 1920

Glu Arg Gln Arg Ile Ile Thr Gly Gly Asn Lys Thr Asp Ile Leu  
 1925 1930 1935

Arg Leu His Glu Leu Thr Lys Ile Tyr Leu Gly Thr Ser Ser Pro  
 1940 1945 1950

Ala Val Asp Arg Leu Cys Val Gly Val Arg Pro Gly Glu Cys Phe  
 1955 1960 1965

Gly Leu Leu Gly Val Asn Gly Ala Gly Lys Thr Thr Phe Lys  
 1970 1975 1980

Met Leu Thr Gly Asp Thr Thr Val Thr Ser Gly Asp Ala Thr Val  
 1985 1990 1995

Ala Gly Lys Ser Ile Leu Thr Asn Ile Ser Glu Val His Gln Asn  
 2000 2005 2010

Met Gly Tyr Cys Pro Gln Phe Asp Ala Ile Asp Glu Leu Leu Thr  
 2015 2020 2025

Gly Arg Glu His Leu Tyr Leu Tyr Ala Arg Leu Arg Gly Val Pro  
 2030 2035 2040

Ala Glu Glu Ile Glu Lys Val Ala Asn Trp Ser Ile Lys Ser Leu  
 2045 2050 2055

Gly Leu Thr Val Tyr Ala Asp Cys Leu Ala Gly Thr Tyr Ser Gly  
 2060 2065 2070

Gly Asn Lys Arg Lys Leu Ser Thr Ala Ile Ala Leu Ile Gly Cys  
 2075 2080 2085

Pro Pro Leu Val Leu Leu Asp Glu Pro Thr Thr Gly Met Asp Pro  
 2090 2095 2100

Gln Ala Arg Arg Met Leu Trp Asn Val Ile Val Ser Ile Ile Arg  
 2105 2110 2115

Lys Gly Arg Ala Val Val Leu Thr Ser His Ser Met Glu Glu Cys  
 2120 2125 2130

Glu Ala Leu Cys Thr Arg Leu Ala Ile Met Val Lys Gly Ala Phe  
 2135 2140 2145

Arg Cys Met Gly Thr Ile Gln His Leu Lys Ser Lys Phe Gly Asp  
 2150 2155 2160

Gly Tyr Ile Val Thr Met Lys Ile Lys Ser Pro Lys Asp Asp Leu  
 2165 2170 2175

Leu Pro Asp Leu Asn Pro Val Glu Gln Phe Phe Gln Gly Asn Phe  
 2180 2185 2190

Pro Gly Ser Val Gln Arg Glu Arg His Tyr Asn Met Leu Gln Phe  
 2195 2200 2205

Gln Val Ser Ser Ser Ser Leu Ala Arg Ile Phe Gln Leu Leu Leu  
 2210 2215 2220

Ser His Lys Asp Ser Leu Leu Ile Glu Glu Tyr Ser Val Thr Gln  
 2225 2230 2235

Thr Thr Leu Asp Gln Val Phe Val Asn Phe Ala Lys Gln Gln Thr  
 2240 2245 2250

Glu Ser His Asp Leu Pro Leu His Pro Arg Ala Ala Gly Ala Ser  
 2255 2260 2265

Arg Gln Ala Gln Asp  
 2270

<210> 125  
 <211> 317  
 <212> PRT  
 <213> Homo sapiens

<400> 125  
 Met Lys Val Leu Trp Ala Ala Leu Leu Val Thr Phe Leu Ala Gly Cys  
 1 5 10 15

Gln Ala Lys Val Glu Gln Ala Val Glu Thr Glu Pro Glu Pro Glu Leu  
 20 25 30

Arg Gln Gln Thr Glu Trp Gln Ser Gly Gln Arg Trp Glu Leu Ala Leu  
 35 40 45

Gly Arg Phe Trp Asp Tyr Leu Arg Trp Val Gln Thr Leu Ser Glu Gln  
 50 55 60

Val Gln Glu Glu Leu Leu Ser Ser Gln Val Thr Gln Glu Leu Arg Ala  
 65 70 75 80

Leu Met Asp Glu Thr Met Lys Glu Leu Lys Ala Tyr Lys Ser Glu Leu  
 85 90 95

Glu Glu Gln Leu Thr Pro Val Ala Glu Glu Thr Arg Ala Arg Leu Ser  
 100 105 110

Lys Glu Leu Gln Ala Ala Gln Ala Arg Leu Gly Ala Asp Met Glu Asp  
 115 120 125

Val Cys Gly Arg Leu Val Gln Tyr Arg Gly Glu Val Gln Ala Met Leu  
 130 135 140

Gly Gln Ser Thr Glu Glu Leu Arg Val Arg Leu Ala Ser His Leu Arg  
 145 150 155 160

Lys Leu Arg Lys Arg Leu Leu Arg Asp Ala Asp Asp Leu Gln Lys Arg  
 165 170 175

Leu Ala Val Tyr Gln Ala Gly Ala Arg Glu Gly Ala Glu Arg Gly Leu  
 180 185 190

Ser Ala Ile Arg Glu Arg Leu Gly Pro Leu Val Glu Gln Gly Arg Val  
 195 200 205

Arg Ala Ala Thr Val Gly Ser Leu Ala Gly Gln Pro Leu Gln Glu Arg  
 210 215 220

Ala Gln Ala Trp Gly Glu Arg Leu Arg Ala Arg Met Glu Glu Met Gly  
 225 230 235 240

Ser Arg Thr Arg Asp Arg Leu Asp Glu Val Lys Glu Gln Val Ala Glu  
 245 250 255

Val Arg Ala Lys Leu Glu Glu Gln Ala Gln Gln Ile Arg Leu Gln Ala  
 260 265 270

Glu Ala Phe Gln Ala Arg Leu Lys Ser Trp Phe Glu Pro Leu Val Glu  
 275 280 285

Asp Met Gln Arg Gln Trp Ala Gly Leu Val Glu Lys Val Gln Ala Ala  
 290 295 300

Val Gly Thr Ser Ala Ala Pro Val Pro Ser Asp Asn His  
 305 310 315

<210> 126  
 <211> 374  
 <212> PRT  
 <213> Homo sapiens

<400> 126  
 Met Leu Ser Thr Ser Arg Ser Arg Phe Ile Arg Asn Thr Asn Glu Ser  
 1 5 10 15

Gly Glu Glu Val Thr Thr Phe Phe Asp Tyr Asp Tyr Gly Ala Pro Cys  
 20 25 30

His Lys Phe Asp Val Lys Gln Ile Gly Ala Gln Leu Leu Pro Pro Leu  
 35 40 45

Tyr Ser Leu Val Phe Ile Phe Gly Phe Val Gly Asn Met Leu Val Val  
 50 55 60

Leu Ile Leu Ile Asn Cys Lys Lys Leu Lys Cys Leu Thr Asp Ile Tyr  
 65 70 75 80

Leu Leu Asn Leu Ala Ile Ser Asp Leu Leu Phe Leu Ile Thr Leu Pro  
 85 90 95

Leu Trp Ala His Ser Ala Ala Asn Glu Trp Val Phe Gly Asn Ala Met  
 100 105 110

Cys Lys Leu Phe Thr Gly Leu Tyr His Ile Gly Tyr Phe Gly Gly Ile  
 115 120 125

Phe Phe Ile Ile Leu Leu Thr Ile Asp Arg Tyr Leu Ala Ile Val His  
 130 135 140

Ala Val Phe Ala Leu Lys Ala Arg Thr Val Thr Phe Gly Val Val Thr  
 145 150 155 160

Ser Val Ile Thr Trp Leu Val Ala Val Phe Ala Ser Val Pro Gly Ile  
 165 170 175

Ile Phe Thr Lys Cys Gln Lys Glu Asp Ser Val Tyr Val Cys Gly Pro  
 180 185 190

Tyr Phe Pro Arg Gly Trp Asn Asn Phe His Thr Ile Met Arg Asn Ile  
 195 200 205

Leu Gly Leu Val Leu Pro Leu Leu Ile Met Val Ile Cys Tyr Ser Gly  
 210 215 220

Ile Leu Lys Thr Leu Leu Arg Cys Arg Asn Glu Lys Lys Arg His Arg  
 225 230 235 240

Ala Val Arg Val Ile Phe Thr Ile Met Ile Val Tyr Phe Leu Phe Trp  
 245 250 255

Thr Pro Tyr Asn Ile Val Ile Leu Leu Asn Thr Phe Gln Glu Phe Phe  
 260 265 270

Gly Leu Ser Asn Cys Glu Ser Thr Ser Gln Leu Asp Gln Ala Thr Gln  
 275 280 285

Val Thr Glu Thr Leu Gly Met Thr His Cys Cys Ile Asn Pro Ile Ile  
 290 295 300

Tyr Ala Phe Val Gly Glu Lys Phe Arg Ser Leu Phe His Ile Ala Leu  
 305 310 315 320

Gly Cys Arg Ile Ala Pro Leu Gln Lys Pro Val Cys Gly Gly Pro Gly  
 325 330 335

Val Arg Pro Gly Lys Asn Val Lys Val Thr Thr Gln Gly Leu Leu Asp  
 340 345 350

Gly Arg Gly Lys Gly Lys Ser Ile Gly Arg Ala Pro Glu Ala Ser Leu  
 355 360 365

Gln Asp Lys Glu Gly Ala  
 370

<210> 127  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 127  
 Met Ala Gly Pro Leu Arg Ala Pro Leu Leu Leu Ala Ile Leu Ala  
 1 5 10 15

Val Ala Leu Ala Val Ser Pro Ala Ala Gly Ser Ser Pro Gly Lys Pro  
 20 25 30

Pro Arg Leu Val Gly Gly Pro Met Asp Ala Ser Val Glu Glu Glu Gly  
 35 40 45

Val Arg Arg Ala Leu Asp Phe Ala Val Gly Glu Tyr Asn Lys Ala Ser  
 50 55 60

Asn Asp Met Tyr His Ser Arg Ala Leu Gln Val Val Arg Ala Arg Lys  
 65 70 75 80

Gln Ile Val Ala Gly Val Asn Tyr Phe Leu Asp Val Glu Leu Gly Arg  
 85 90 95

Thr Thr Cys Thr Lys Thr Gln Pro Asn Leu Asp Asn Cys Pro Phe His  
 100 105 110

Asp Gln Pro His Leu Lys Arg Lys Ala Phe Cys Ser Phe Gln Ile Tyr  
 115 120 125

Ala Val Pro Trp Gln Gly Thr Met Thr Leu Ser Lys Ser Thr Cys Gln  
 130 135 140

Asp Ala  
 145

<210> 128  
 <211> 5622  
 <212> PRT  
 <213> Homo sapiens

<400> 128  
 Met Ile Ser Trp Glu Val Val His Thr Val Phe Leu Phe Ala Leu Leu  
 1 5 10 15

Tyr Ser Ser Leu Ala Gln Asp Ala Ser Pro Gln Ser Glu Ile Arg Ala  
 20 25 30

Glu Glu Ile Pro Glu Gly Ala Ser Thr Leu Ala Phe Val Phe Asp Val  
 35 40 45

Thr Gly Ser Met Tyr Asp Asp Leu Val Gln Val Ile Glu Gly Ala Ser  
 50 55 60

Lys Ile Leu Glu Thr Ser Leu Lys Arg Pro Lys Arg Pro Leu Phe Asn  
 65 70 75 80

Phe Ala Leu Val Pro Phe His Asp Pro Glu Ile Gly Pro Val Thr Ile  
 85 90 95

Thr Thr Asp Pro Lys Lys Phe Gln Tyr Glu Leu Arg Glu Leu Tyr Val  
 100 105 110

Gln Gly Gly Asp Cys Pro Glu Met Ser Ile Gly Ala Ile Lys Ile  
 115 120 125

Ala Leu Glu Ile Ser Leu Pro Gly Ser Phe Ile Tyr Val Phe Thr Asp  
 130 135 140

Ala Arg Ser Lys Asp Tyr Arg Leu Thr His Glu Val Leu Gln Leu Ile  
 145 150 155 160

Gln Gln Lys Gln Ser Gln Val Val Phe Val Leu Thr Gly Asp Cys Asp  
 165 170 175

Asp Arg Thr His Ile Gly Tyr Lys Val Tyr Glu Glu Ile Ala Ser Thr  
 180 185 190

Ser Ser Gly Gln Val Phe His Leu Asp Lys Lys Gln Val Asn Glu Val  
 195 200 205

Leu Lys Trp Val Glu Glu Ala Val Gln Ala Ser Lys Val His Leu Leu  
 210 215 220

Ser Thr Asp His Leu Glu Gln Ala Val Asn Thr Trp Arg Ile Pro Phe  
 225 230 235 240

Asp Pro Ser Leu Lys Glu Val Thr Val Ser Leu Ser Gly Pro Ser Pro  
 245 250 255

Met Ile Glu Ile Arg Asn Pro Leu Gly Lys Leu Ile Lys Lys Gly Phe  
 260 265 270

Gly Leu His Glu Leu Leu Asn Ile His Asn Ser Ala Lys Val Val Asn  
 275 280 285

Val Lys Glu Pro Glu Ala Gly Met Trp Thr Val Lys Thr Ser Ser Ser  
 290 295 300

Gly Arg His Ser Val Arg Ile Thr Gly Leu Ser Thr Ile Asp Phe Arg  
 305 310 315 320

Ala Gly Phe Ser Arg Lys Pro Thr Leu Asp Phe Lys Lys Thr Val Ser  
 325 330 335

Arg Pro Val Gln Gly Ile Pro Thr Tyr Val Leu Leu Asn Thr Ser Gly  
 340 345 350

Ile Ser Thr Pro Ala Arg Ile Asp Leu Leu Glu Leu Leu Ser Ile Ser  
 355 360 365

Gly Ser Ser Leu Lys Thr Ile Pro Val Lys Tyr Tyr Pro His Arg Lys  
 370 375 380

Pro Tyr Gly Ile Trp Asn Ile Ser Asp Phe Val Pro Pro Asn Glu Ala  
 385 390 395 400

Phe Phe Leu Lys Val Thr Gly Tyr Asp Lys Asp Asp Tyr Leu Phe Gln  
 405 410 415

Arg Val Ser Ser Val Ser Phe Ser Ser Ile Val Pro Asp Ala Pro Lys  
 420 425 430

Val Thr Met Pro Glu Lys Thr Pro Gly Tyr Tyr Leu Gln Pro Gly Gln  
 435 440 445

Ile Pro Cys Ser Val Asp Ser Leu Leu Pro Phe Thr Leu Ser Phe Val  
 450 455 460

Arg Asn Gly Val Thr Leu Gly Val Asp Gln Tyr Leu Lys Glu Ser Ala  
 465 470 475 480

Ser Val Asn Leu Asp Ile Ala Lys Val Thr Leu Ser Asp Glu Gly Phe  
 485 490 495

Tyr Glu Cys Ile Ala Val Ser Ser Ala Gly Thr Gly Arg Ala Gln Thr  
 500 505 510

Phe Phe Asp Val Ser Glu Pro Pro Val Ile Gln Val Pro Asn Asn  
 515 520 525

Val Thr Val Thr Pro Gly Glu Arg Ala Val Leu Thr Cys Leu Ile Ile  
 530 535 540

Ser Ala Val Asp Tyr Asn Leu Thr Trp Gln Arg Asn Asp Arg Asp Val  
 545 550 555 560

Arg Leu Ala Glu Pro Ala Arg Ile Arg Thr Leu Ala Asn Leu Ser Leu  
 565 570 575

Glu Leu Lys Ser Val Lys Phe Asn Asp Ala Gly Glu Tyr His Cys Met  
 580 585 590

Val Ser Ser Glu Gly Gly Ser Ser Ala Ala Ser Val Phe Leu Thr Val  
595 600 605

Gln Glu Pro Pro Lys Val Thr Val Met Pro Lys Asn Gln Ser Phe Thr  
610 615 620

Gly Gly Ser Glu Val Ser Ile Met Cys Ser Ala Thr Gly Tyr Pro Lys  
625 630 635 640

Pro Lys Ile Ala Trp Thr Val Asn Asp Met Phe Ile Val Gly Ser His  
645 650 655

Arg Tyr Arg Met Thr Ser Asp Gly Thr Leu Phe Ile Lys Asn Ala Ala  
660 665 670

Pro Lys Asp Ala Gly Ile Tyr Gly Cys Leu Ala Ser Asn Ser Ala Gly  
675 680 685

Thr Asp Lys Gln Asn Ser Thr Leu Arg Tyr Ile Glu Ala Pro Lys Leu  
690 695 700

Met Val Val Gln Ser Glu Leu Leu Val Ala Leu Gly Asp Ile Thr Val  
705 710 715 720

Met Glu Cys Lys Thr Ser Gly Ile Pro Pro Pro Gln Val Lys Trp Phe  
725 730 735

Lys Gly Asp Leu Glu Leu Arg Pro Ser Thr Phe Leu Ile Ile Asp Pro  
740 745 750

Leu Leu Gly Leu Leu Lys Ile Gln Glu Thr Gln Asp Leu Asp Ala Gly  
755 760 765

Asp Tyr Thr Cys Val Ala Ile Asn Glu Ala Gly Arg Ala Thr Gly Lys  
770 775 780

Ile Thr Leu Asp Val Gly Ser Pro Pro Val Phe Ile Gln Glu Pro Ala  
785 790 795 800

Asp Val Ser Met Glu Ile Gly Ser Asn Val Thr Leu Pro Cys Tyr Val  
805 810 815

Gln Gly Tyr Pro Glu Pro Thr Ile Lys Trp Arg Arg Leu Asp Asn Met  
 820 825 830

Pro Ile Phe Ser Arg Pro Phe Ser Val Ser Ser Ile Ser Gln Leu Arg  
 835 840 845

Thr Gly Ala Leu Phe Ile Leu Asn Leu Trp Ala Ser Asp Lys Gly Thr  
 850 855 860

Tyr Ile Cys Glu Ala Glu Asn Gln Phe Gly Lys Ile Gln Ser Glu Thr  
 865 870 875 880

Thr Val Thr Val Thr Gly Leu Val Ala Pro Leu Ile Gly Ile Ser Pro  
 885 890 895

Ser Val Ala Asn Val Ile Glu Gly Gln Gln Leu Thr Leu Pro Cys Thr  
 900 905 910

Leu Leu Ala Gly Asn Pro Ile Pro Glu Arg Arg Trp Ile Lys Asn Ser  
 915 920 925

Ala Met Leu Leu Gln Asn Pro Tyr Ile Thr Val Arg Ser Asp Gly Ser  
 930 935 940

Leu His Ile Glu Arg Val Gln Leu Gln Asp Gly Gly Glu Tyr Thr Cys  
 945 950 955 960

Val Ala Ser Asn Val Ala Gly Thr Asn Asn Lys Thr Thr Ser Val Val  
 965 970 975

Val His Val Leu Pro Thr Ile Gln His Gly Gln Gln Ile Leu Ser Thr  
 980 985 990

Ile Glu Gly Ile Pro Val Thr Leu Pro Cys Lys Ala Ser Gly Asn Pro  
 995 1000 1005

Lys Pro Ser Val Ile Trp Ser Lys Lys Gly Glu Leu Ile Ser Thr  
 1010 1015 1020

Ser Ser Ala Lys Phe Ser Ala Gly Ala Asp Gly Ser Leu Tyr Val  
 1025 1030 1035

Val Ser Pro Gly Gly Glu Glu Ser Gly Glu Tyr Val Cys Thr Ala  
 1040 1045 1050

Thr Asn Thr Ala Gly Tyr Ala Lys Arg Lys Val Gln Leu Thr Val  
 1055 1060 1065

Tyr Val Arg Pro Arg Val Phe Gly Asp Gln Arg Gly Leu Ser Gln  
 1070 1075 1080

Asp Lys Pro Val Glu Ile Ser Val Leu Ala Gly Glu Glu Val Thr  
 1085 1090 1095

Leu Pro Cys Glu Val Lys Ser Leu Pro Pro Pro Ile Ile Thr Trp  
 1100 1105 1110

Ala Lys Glu Thr Gln Leu Ile Ser Pro Phe Ser Pro Arg His Thr  
 1115 1120 1125

Phe Leu Pro Ser Gly Ser Met Lys Ile Thr Glu Thr Arg Thr Ser  
 1130 1135 1140

Asp Ser Gly Met Tyr Leu Cys Val Ala Thr Asn Ile Ala Gly Asn  
 1145 1150 1155

Val Thr Gln Ala Val Lys Leu Asn Val His Val Pro Pro Lys Ile  
 1160 1165 1170

Gln Arg Gly Pro Lys His Leu Lys Val Gln Val Gly Gln Arg Val  
 1175 1180 1185

Asp Ile Pro Cys Asn Ala Gln Gly Thr Pro Leu Pro Val Ile Thr  
 1190 1195 1200

Trp Ser Lys Gly Gly Ser Thr Met Leu Val Asp Gly Glu His His  
 1205 1210 1215

Val Ser Asn Pro Asp Gly Thr Leu Ser Ile Asp Gln Ala Thr Pro  
 1220 1225 1230

Ser Asp Ala Gly Ile Tyr Thr Cys Val Ala Thr Asn Ile Ala Gly  
 1235 1240 1245

Thr Asp Glu Thr Glu Ile Thr Leu His Val Gln Glu Pro Pro Thr  
 1250 1255 1260

Val Glu Asp Leu Glu Pro Pro Tyr Asn Thr Thr Phe Gln Glu Arg  
 1265 1270 1275

Val Ala Asn Gln Arg Ile Glu Phe Pro Cys Pro Ala Lys Gly Thr  
 1280 1285 1290

Pro Lys Pro Thr Ile Lys Trp Leu His Asn Gly Arg Glu Leu Thr  
 1295 1300 1305

Gly Arg Glu Pro Gly Ile Ser Ile Leu Glu Asp Gly Thr Leu Leu  
 1310 1315 1320

Val Ile Ala Ser Val Thr Pro Tyr Asp Asn Gly Glu Tyr Ile Cys  
 1325 1330 1335

Val Ala Val Asn Glu Ala Gly Thr Thr Glu Arg Lys Tyr Asn Leu  
 1340 1345 1350

Lys Val His Val Pro Pro Val Ile Lys Asp Lys Glu Gln Val Thr  
 1355 1360 1365

Asn Val Ser Val Leu Leu Asn Gln Leu Thr Asn Leu Phe Cys Glu  
 1370 1375 1380

Val Glu Gly Thr Pro Ser Pro Ile Ile Met Trp Tyr Lys Asp Asn  
 1385 1390 1395

Val Gln Val Thr Glu Ser Ser Thr Ile Gln Thr Val Asn Asn Gly  
 1400 1405 1410

Lys Ile Leu Lys Leu Phe Arg Ala Thr Pro Glu Asp Ala Gly Arg  
 1415 1420 1425

Tyr Ser Cys Lys Ala Ile Asn Ile Ala Gly Thr Ser Gln Lys Tyr  
 1430 1435 1440

Phe Asn Ile Asp Val Leu Val Pro Pro Thr Ile Ile Gly Thr Asn  
 1445 1450 1455

Phe Pro Asn Glu Val Ser Val Val Leu Asn Arg Asp Val Ala Leu  
 1460 1465 1470

Glu Cys Gln Val Lys Gly Thr Pro Phe Pro Asp Ile His Trp Phe  
 1475 1480 1485

Lys Asp Gly Lys Pro Leu Phe Leu Gly Asp Pro Asn Val Glu Leu  
 1490 1495 1500

Leu Asp Arg Gly Gln Val Leu His Leu Lys Asn Ala Arg Arg Asn  
 1505 1510 1515

Asp Lys Gly Arg Tyr Gln Cys Thr Val Ser Asn Ala Ala Gly Lys  
 1520 1525 1530

Gln Ala Lys Asp Ile Lys Leu Thr Ile Tyr Ile Pro Pro Ser Ile  
 1535 1540 1545

Lys Gly Gly Asn Val Thr Thr Asp Ile Ser Val Leu Ile Asn Ser  
 1550 1555 1560

Leu Ile Lys Leu Glu Cys Glu Thr Arg Gly Leu Pro Met Pro Ala  
 1565 1570 1575

Ile Thr Trp Tyr Lys Asp Gly Gln Pro Ile Met Ser Ser Ser Gln  
 1580 1585 1590

Ala Leu Tyr Ile Asp Lys Gly Gln Tyr Leu His Ile Pro Arg Ala  
 1595 1600 1605

Gln Val Ser Asp Ser Ala Thr Tyr Thr Cys His Val Ala Asn Val  
 1610 1615 1620

Ala Gly Thr Ala Glu Lys Ser Phe His Val Asp Val Tyr Val Pro  
 1625 1630 1635

Pro Met Ile Glu Gly Asn Leu Ala Thr Pro Leu Asn Lys Gln Val  
 1640 1645 1650

Val Ile Ala His Ser Leu Thr Leu Glu Cys Lys Ala Ala Gly Asn  
 1655 1660 1665

Pro Ser Pro Ile Leu Thr Trp Leu Lys Asp Gly Val Pro Val Lys  
 1670 1675 1680

Ala Asn Asp Asn Ile Arg Ile Glu Ala Gly Gly Lys Lys Leu Glu  
 1685 1690 1695

Ile Met Ser Ala Gln Glu Ile Asp Arg Gly Gln Tyr Ile Cys Val  
 1700 1705 1710

Ala Thr Ser Val Ala Gly Glu Lys Glu Ile Lys Tyr Glu Val Asp  
 1715 1720 1725

Val Leu Val Pro Pro Ala Ile Glu Gly Gly Asp Glu Thr Ser Tyr  
 1730 1735 1740

Phe Ile Val Met Val Asn Asn Leu Leu Glu Leu Asp Cys His Val  
 1745 1750 1755

Thr Gly Ser Pro Pro Pro Thr Ile Met Trp Leu Lys Asp Gly Gln  
 1760 1765 1770

Leu Ile Asp Glu Arg Asp Gly Phe Lys Ile Leu Leu Asn Gly Arg  
 1775 1780 1785

Lys Leu Val Ile Ala Gln Ala Gln Val Ser Asn Thr Gly Leu Tyr  
 1790 1795 1800

Arg Cys Met Ala Ala Asn Thr Ala Gly Asp His Lys Lys Glu Phe  
 1805 1810 1815

Glu Val Thr Val His Val Pro Pro Thr Ile Lys Ser Ser Gly Leu  
 1820 1825 1830

Ser Glu Arg Val Val Val Lys Tyr Lys Pro Val Ala Leu Gln Cys  
 1835 1840 1845

Ile Ala Asn Gly Ile Pro Asn Pro Ser Ile Thr Trp Leu Lys Asp  
 1850 1855 1860

Asp Gln Pro Val Asn Thr Ala Gln Gly Asn Leu Lys Ile Gln Ser  
 1865 1870 1875

Ser Gly Arg Val Leu Gln Ile Ala Lys Thr Leu Leu Glu Asp Ala  
 1880 1885 1890

Gly Arg Tyr Thr Cys Val Ala Thr Asn Ala Ala Gly Glu Thr Gln  
 1895 1900 1905

Gln His Ile Gln Leu His Val His Glu Pro Pro Ser Leu Glu Asp  
 1910 1915 1920

Ala Gly Lys Met Leu Asn Glu Thr Val Leu Val Ser Asn Pro Val  
 1925 1930 1935

Gln Leu Glu Cys Lys Ala Ala Gly Asn Pro Val Pro Val Ile Thr  
 1940 1945 1950

Trp Tyr Lys Asp Asn Arg Leu Leu Ser Gly Ser Thr Ser Met Thr  
 1955 1960 1965

Phe Leu Asn Arg Gly Gln Ile Ile Asp Ile Glu Ser Ala Gln Ile  
 1970 1975 1980

Ser Asp Ala Gly Ile Tyr Lys Cys Val Ala Ile Asn Ser Ala Gly  
 1985 1990 1995

Ala Thr Glu Leu Phe Tyr Ser Leu Gln Val His Val Ala Pro Ser  
 2000 2005 2010

Ile Ser Gly Ser Asn Asn Met Val Ala Val Val Val Asn Asn Pro  
 2015 2020 2025

Val Arg Leu Glu Cys Glu Ala Arg Gly Ile Pro Ala Pro Ser Leu  
 2030 2035 2040

Thr Trp Leu Lys Asp Gly Ser Pro Val Ser Ser Phe Ser Asn Gly  
 2045 2050 2055

Leu Gln Val Leu Ser Gly Gly Arg Ile Leu Ala Leu Thr Ser Ala  
 2060 2065 2070

Gln Ile Ser Asp Thr Gly Arg Tyr Thr Cys Val Ala Val Asn Ala  
 2075 2080 2085

Ala Gly Glu Lys Gln Arg Asp Ile Asp Leu Arg Val Tyr Val Pro  
 2090 2095 2100

Pro Asn Ile Met Gly Glu Glu Gln Asn Val Ser Val Leu Ile Ser  
 2105 2110 2115

Gln Ala Val Glu Leu Leu Cys Gln Ser Asp Ala Ile Pro Pro Pro  
 2120 2125 2130

Thr Leu Thr Trp Leu Lys Asp Gly His Pro Leu Leu Lys Lys Pro  
 2135 2140 2145

Gly Leu Ser Ile Ser Glu Asn Arg Ser Val Leu Lys Ile Glu Asp  
 2150 2155 2160

Ala Gln Val Gln Asp Thr Gly Arg Tyr Thr Cys Glu Ala Thr Asn  
 2165 2170 2175

Val Ala Gly Lys Thr Glu Lys Lys Asn Tyr Asn Val Asn Ile Trp  
 2180 2185 2190

Val Pro Pro Asn Ile Gly Gly Ser Asp Glu Leu Thr Gln Leu Thr  
 2195 2200 2205

Val Ile Glu Gly Asn Leu Ile Ser Leu Leu Cys Glu Ser Ser Gly  
 2210 2215 2220

Ile Pro Pro Pro Asn Leu Ile Trp Lys Lys Lys Gly Ser Pro Val  
 2225 2230 2235

Leu Thr Asp Ser Met Gly Arg Val Arg Ile Ile Ala Glu Lys Ser  
 2240 2245 2250

Asp Ala Ala Leu Tyr Ser Cys Val Ala Ser Asn Val Ala Gly Thr  
 2255 2260 2265

Ala Lys Lys Glu Tyr Asn Leu Gln Val Tyr Ile Arg Pro Thr Ile  
 2270 2275 2280

Thr Asn Ser Gly Ser His Pro Thr Glu Ile Ile Val Thr Arg Gly  
 2285 2290 2295

Lys Ser Ile Ser Leu Glu Cys Glu Val Gln Gly Ile Pro Pro Pro  
 2300 2305 2310

Thr Val Thr Trp Met Lys Asp Gly His Pro Leu Ile Lys Ala Lys  
 2315 2320 2325

Gly Val Glu Ile Leu Asp Glu Gly His Ile Leu Gln Leu Lys Asn  
 2330 2335 2340

Ile His Val Ser Asp Thr Gly Arg Tyr Val Cys Val Ala Val Asn  
 2345 2350 2355

Val Ala Gly Met Thr Asp Lys Lys Tyr Asp Leu Ser Val His Ala  
 2360 2365 2370

Pro Pro Ser Ile Ile Gly Asn His Arg Ser Pro Glu Asn Ile Ser  
 2375 2380 2385

Val Val Glu Lys Asn Ser Val Ser Leu Thr Cys Glu Ala Ser Gly  
 2390 2395 2400

Ile Pro Leu Pro Ser Ile Thr Trp Phe Lys Asp Gly Trp Pro Val  
 2405 2410 2415

Ser Leu Ser Asn Ser Val Arg Ile Leu Ser Gly Gly Arg Met Leu  
 2420 2425 2430

Arg Leu Met Gln Thr Thr Met Glu Asp Ala Gly Gln Tyr Thr Cys  
 2435 2440 2445

Val Val Arg Asn Ala Ala Gly Glu Glu Arg Lys Ile Phe Gly Leu  
 2450 2455 2460

Ser Val Leu Val Pro Pro His Ile Val Gly Glu Asn Thr Leu Glu  
 2465 2470 2475

Asp Val Lys Val Lys Glu Lys Gln Ser Val Thr Leu Thr Cys Glu  
 2480 2485 2490

Val Thr Gly Asn Pro Val Pro Glu Ile Thr Trp His Lys Asp Gly  
 2495 2500 2505

Gln Pro Leu Gln Glu Asp Glu Ala His His Ile Ile Ser Gly Gly  
 2510 2515 2520

Arg Phe Leu Gln Ile Thr Asn Val Gln Val Pro His Thr Gly Arg  
 2525 2530 2535

Tyr Thr Cys Leu Ala Ser Ser Pro Ala Gly His Lys Ser Arg Ser  
 2540 2545 2550

Phe Ser Leu Asn Val Phe Val Ser Pro Thr Ile Ala Gly Val Gly  
 2555 2560 2565

Ser Asp Gly Asn Pro Glu Asp Val Thr Val Ile Leu Asn Ser Pro  
 2570 2575 2580

Thr Ser Leu Val Cys Glu Ala Tyr Ser Tyr Pro Pro Ala Thr Ile  
 2585 2590 2595

Thr Trp Phe Lys Asp Gly Thr Pro Leu Glu Ser Asn Arg Asn Ile  
 2600 2605 2610

Arg Ile Leu Pro Gly Gly Arg Thr Leu Gln Ile Leu Asn Ala Gln  
 2615 2620 2625

Glu Asp Asn Ala Gly Arg Tyr Ser Cys Val Ala Thr Asn Glu Ala  
 2630 2635 2640

Gly Glu Met Ile Lys His Tyr Glu Val Lys Val Tyr Ile Pro Pro  
 2645 2650 2655

Ile Ile Asn Lys Gly Asp Leu Trp Gly Pro Gly Leu Ser Pro Lys  
 2660 2665 2670

Glu Val Lys Ile Lys Val Asn Asn Thr Leu Thr Leu Glu Cys Glu  
 2675 2680 2685

Ala Tyr Ala Ile Pro Ser Ala Ser Leu Ser Trp Tyr Lys Asp Gly  
 2690 2695 2700

Gln Pro Leu Lys Ser Asp Asp His Val Asn Ile Ala Ala Asn Gly  
 2705 2710 2715

His Thr Leu Gln Ile Lys Glu Ala Gln Ile Ser Asp Thr Gly Arg  
 2720 2725 2730

Tyr Thr Cys Val Ala Ser Asn Ile Ala Gly Glu Asp Glu Leu Asp  
 2735 2740 2745

Phe Asp Val Asn Ile Gln Val Pro Pro Ser Phe Gln Lys Leu Trp  
 2750 2755 2760

Glu Ile Gly Asn Met Leu Asp Thr Gly Arg Asn Gly Glu Ala Lys  
 2765 2770 2775

Asp Val Ile Ile Asn Asn Pro Ile Ser Leu Tyr Cys Glu Thr Asn  
 2780 2785 2790

Ala Ala Pro Pro Pro Thr Leu Thr Trp Tyr Lys Asp Gly His Pro  
 2795 2800 2805

Leu Thr Ser Ser Asp Lys Val Leu Ile Leu Pro Gly Gly Arg Val  
 2810 2815 2820

Leu Gln Ile Pro Arg Ala Lys Val Glu Asp Ala Gly Arg Tyr Thr  
 2825 2830 2835

Cys Val Ala Val Asn Glu Ala Gly Glu Asp Ser Leu Gln Tyr Asp  
 2840 2845 2850

Val Arg Val Leu Val Pro Pro Ile Ile Lys Gly Ala Asn Ser Asp  
 2855 2860 2865

Leu Pro Glu Glu Val Thr Val Leu Val Asn Lys Ser Ala Leu Ile  
 2870 2875 2880

Glu Cys Leu Ser Ser Gly Ser Pro Ala Pro Arg Asn Ser Trp Gln  
 2885 2890 2895

Lys Asp Gly Gln Pro Leu Leu Glu Asp Asp His His Lys Phe Leu  
 2900 2905 2910

Ser Asn Gly Arg Ile Leu Gln Ile Leu Asn Thr Gln Ile Thr Asp  
 2915 2920 2925

Ile Gly Arg Tyr Val Cys Val Ala Glu Asn Thr Ala Gly Ser Ala  
 2930 2935 2940

Lys Lys Tyr Phe Asn Leu Asn Val His Val Pro Pro Ser Val Ile  
 2945 2950 2955

Gly Pro Lys Ser Glu Asn Leu Thr Val Val Val Asn Asn Phe Ile  
 2960 2965 2970

Ser Leu Thr Cys Glu Val Ser Gly Phe Pro Pro Pro Asp Leu Ser  
 2975 2980 2985

Trp Leu Lys Asn Lys Leu Asn Thr Asn Thr Leu Ile Val Pro Gly  
 2990 2995 3000

Gly Arg Thr Leu Gln Ile Ile Arg Ala Lys Val Ser Asp Gly Gly  
 3005 3010 3015

Glu Tyr Thr Cys Ile Ala Ile Asn Gln Ala Gly Glu Ser Lys Lys  
 3020 3025 3030

Lys Phe Ser Leu Thr Val Tyr Val Pro Pro Ser Ile Lys Asp His  
 3035 3040 3045

Asp Ser Glu Ser Leu Ser Val Val Asn Val Arg Glu Gly Thr Ser  
 3050 3055 3060

Val Ser Leu Glu Cys Glu Ser Asn Ala Val Pro Pro Pro Val Ile  
 3065 3070 3075

Thr Trp Tyr Lys Asn Gly Arg Met Ile Thr Glu Ser Thr His Val  
 3080 3085 3090

Glu Ile Leu Ala Asp Gly Gln Met Leu His Ile Lys Lys Ala Glu  
 3095 3100 3105

Val Ser Asp Thr Gly Gln Tyr Val Cys Arg Ala Ile Asn Val Ala  
 3110 3115 3120

Gly Arg Asp Asp Lys Asn Phe His Leu Asn Val Tyr Val Pro Pro  
 3125 3130 3135

Ser Ile Glu Gly Pro Glu Arg Glu Val Ile Val Glu Thr Ile Ser  
 3140 3145 3150

Asn Pro Val Thr Leu Thr Cys Asp Ala Thr Gly Ile Pro Pro Pro  
 3155 3160 3165

Thr Ile Ala Trp Leu Lys Asn His Lys Arg Ile Glu Asn Ser Asp  
 3170 3175 3180

Ser Leu Glu Val Arg Ile Leu Ser Gly Gly Ser Lys Leu Gln Ile  
 3185 3190 3195

Ala Arg Ser Gln His Ser Asp Ser Gly Asn Tyr Thr Cys Ile Ala  
 3200 3205 3210

Ser Asn Met Glu Gly Lys Ala Gln Lys Tyr Tyr Phe Leu Ser Ile  
 3215 3220 3225

Gln Val Pro Pro Ser Val Ala Gly Ala Glu Ile Pro Ser Asp Val  
 3230 3235 3240

Ser Val Leu Leu Gly Glu Asn Val Glu Leu Val Cys Asn Ala Asn  
 3245 3250 3255

Gly Ile Pro Thr Pro Leu Ile Gln Trp Leu Lys Asp Gly Lys Pro  
 3260 3265 3270

Ile Ala Ser Gly Glu Thr Glu Arg Ile Arg Val Ser Ala Asn Gly  
 3275 3280 3285

Ser Thr Leu Asn Ile Tyr Gly Ala Leu Thr Ser Asp Thr Gly Lys  
 3290 3295 3300

Tyr Thr Cys Val Ala Thr Asn Pro Ala Gly Glu Glu Asp Arg Ile  
 3305 3310 3315

Phe Asn Leu Asn Val Tyr Val Thr Pro Thr Ile Arg Gly Asn Lys  
 3320 3325 3330

Asp Glu Ala Glu Lys Leu Met Thr Leu Val Asp Thr Ser Ile Asn  
 3335 3340 3345

Ile Glu Cys Arg Ala Thr Gly Thr Pro Pro Pro Gln Ile Asn Trp  
 3350 3355 3360

Leu Lys Asn Gly Leu Pro Leu Pro Leu Ser Ser His Ile Arg Leu  
 3365 3370 3375

Leu Ala Ala Gly Gln Val Ile Arg Ile Val Arg Ala Gln Val Ser  
 3380 3385 3390

Asp Val Ala Val Tyr Thr Cys Val Ala Ser Asn Arg Ala Gly Val  
 3395 3400 3405

Asp Asn Lys His Tyr Asn Leu Gln Val Phe Ala Pro Pro Asn Met  
 3410 3415 3420

Asp Asn Ser Met Gly Thr Glu Glu Ile Thr Val Leu Lys Gly Ser  
 3425 3430 3435

Ser Thr Ser Met Ala Cys Ile Thr Asp Gly Thr Pro Ala Pro Ser  
 3440 3445 3450

Met Ala Trp Leu Arg Asp Gly Gln Pro Leu Gly Leu Asp Ala His  
 3455 3460 3465

Leu Thr Val Ser Thr His Gly Met Val Leu Gln Leu Leu Lys Ala  
 3470 3475 3480

Glu Thr Glu Asp Ser Gly Lys Tyr Thr Cys Ile Ala Ser Asn Glu  
 3485 3490 3495

Ala Gly Glu Val Ser Lys His Phe Ile Leu Lys Val Leu Glu Pro  
 3500 3505 3510

Pro His Ile Asn Gly Ser Glu Glu His Glu Glu Ile Ser Val Ile  
 3515 3520 3525

Val Asn Asn Pro Leu Glu Leu Thr Cys Ile Ala Ser Gly Ile Pro  
 3530 3535 3540

Ala Pro Lys Met Thr Trp Met Lys Asp Gly Arg Pro Leu Pro Gln  
 3545 3550 3555

Thr Asp Gln Val Gln Thr Leu Gly Gly Gly Glu Val Leu Arg Ile  
 3560 3565 3570

Ser Thr Ala Gln Val Glu Asp Thr Gly Arg Tyr Thr Cys Leu Ala  
 3575 3580 3585

Ser Ser Pro Ala Gly Asp Asp Asp Lys Glu Tyr Leu Val Arg Val  
 3590 3595 3600

His Val Pro Pro Asn Ile Ala Gly Thr Asp Glu Pro Arg Asp Ile  
 3605 3610 3615

Thr Val Leu Arg Asn Arg Gln Val Thr Leu Glu Cys Lys Ser Asp  
 3620 3625 3630

Ala Val Pro Pro Pro Val Ile Thr Trp Leu Arg Asn Gly Glu Arg  
 3635 3640 3645

Leu Gln Ala Thr Pro Arg Val Arg Ile Leu Ser Gly Gly Arg Tyr  
 3650 3655 3660

Leu Gln Ile Asn Asn Ala Asp Leu Gly Asp Thr Ala Asn Tyr Thr  
 3665 3670 3675

Cys Val Ala Ser Asn Ile Ala Gly Lys Thr Thr Arg Glu Phe Ile  
 3680 3685 3690

Leu Thr Val Asn Val Pro Pro Asn Ile Lys Gly Gly Pro Gln Ser  
 3695 3700 3705

Leu Val Ile Leu Leu Asn Lys Ser Thr Val Leu Glu Cys Ile Ala  
 3710 3715 3720

Glu Gly Val Pro Thr Pro Arg Ile Thr Trp Arg Lys Asp Gly Ala  
 3725 3730 3735

Val Leu Ala Gly Asn His Ala Arg Tyr Ser Ile Leu Glu Asn Gly  
 3740 3745 3750

Phe Leu His Ile Gln Ser Ala His Val Thr Asp Thr Gly Arg Tyr  
 3755 3760 3765

Leu Cys Met Ala Thr Asn Ala Ala Gly Thr Asp Arg Arg Arg Ile  
 3770 3775 3780

Asp Leu Gln Val His Val Pro Pro Ser Ile Ala Pro Gly Pro Thr  
 3785 3790 3795

Asn Met Thr Val Ile Val Asn Val Gln Thr Thr Leu Ala Cys Glu  
 3800 3805 3810

Ala Thr Gly Ile Pro Lys Pro Ser Ile Asn Trp Arg Lys Asn Gly  
 3815 3820 3825

His Leu Leu Asn Val Asp Gln Asn Gln Asn Ser Tyr Arg Leu Leu  
 3830 3835 3840

Ser Ser Gly Ser Leu Val Ile Ile Ser Pro Ser Val Asp Asp Thr  
 3845 3850 3855

Ala Thr Tyr Glu Cys Thr Val Thr Asn Gly Ala Gly Asp Asp Lys  
 3860 3865 3870

Arg Thr Val Asp Leu Thr Val Gln Val Pro Pro Ser Ile Ala Asp  
 3875 3880 3885

Glu Pro Thr Asp Phe Leu Val Thr Lys His Ala Pro Ala Val Ile  
 3890 3895 3900

Thr Cys Thr Ala Ser Gly Val Pro Phe Pro Ser Ile His Trp Thr  
 3905 3910 3915

Lys Asn Gly Ile Arg Leu Leu Pro Arg Gly Asp Gly Tyr Arg Ile  
 3920 3925 3930

Leu Ser Ser Gly Ala Ile Glu Ile Leu Ala Thr Gln Leu Asn His  
 3935 3940 3945

Ala Gly Arg Tyr Thr Cys Val Ala Arg Asn Ala Ala Gly Ser Ala  
 3950 3955 3960

His Arg His Val Thr Leu His Val His Glu Pro Pro Val Ile Gln  
 3965 3970 3975

Pro Gln Pro Ser Glu Leu His Val Ile Leu Asn Asn Pro Ile Leu  
 3980 3985 3990

Leu Pro Cys Glu Ala Thr Gly Thr Pro Ser Pro Phe Ile Thr Trp  
 3995 4000 4005

Gln Lys Glu Gly Ile Asn Val Asn Thr Ser Gly Arg Asn His Ala  
 4010 4015 4020

Val Leu Pro Ser Gly Gly Leu Gln Ile Ser Arg Ala Val Arg Glu  
 4025 4030 4035

Asp Ala Gly Thr Tyr Met Cys Val Ala Gln Asn Pro Ala Gly Thr  
 4040 4045 4050

Ala Leu Gly Lys Ile Lys Leu Asn Val Gln Val Pro Pro Val Ile  
 4055 4060 4065

Ser Pro His Leu Lys Glu Tyr Val Ile Ala Val Asp Lys Pro Ile  
 4070 4075 4080

Thr Leu Ser Cys Glu Ala Asp Gly Leu Pro Pro Pro Asp Ile Thr  
 4085 4090 4095

Trp His Lys Asp Gly Arg Ala Ile Val Glu Ser Ile Arg Gln Arg  
 4100 4105 4110

Val Leu Ser Ser Gly Ser Leu Gln Ile Ala Phe Val Gln Pro Gly  
 4115 4120 4125

Asp Ala Gly His Tyr Thr Cys Met Ala Ala Asn Val Ala Gly Ser  
 4130 4135 4140

Ser Ser Thr Ser Thr Lys Leu Thr Val His Val Pro Pro Arg Ile  
 4145 4150 4155

Arg Ser Thr Glu Gly His Tyr Thr Val Asn Glu Asn Ser Gln Ala  
 4160 4165 4170

Ile Leu Pro Cys Val Ala Asp Gly Ile Pro Thr Pro Ala Ile Asn  
 4175 4180 4185

Trp Lys Lys Asp Asn Val Leu Leu Ala Asn Leu Leu Gly Lys Tyr  
 4190 4195 4200

Thr Ala Glu Pro Tyr Gly Glu Leu Ile Leu Glu Asn Val Val Leu  
 4205 4210 4215

Glu Asp Ser Gly Phe Tyr Thr Cys Val Ala Asn Asn Ala Ala Gly  
 4220 4225 4230

Glu Asp Thr His Thr Val Ser Leu Thr Val His Val Leu Pro Thr  
 4235 4240 4245

Phe Thr Glu Leu Pro Gly Asp Val Ser Leu Asn Lys Gly Glu Gln  
 4250 4255 4260

Leu Arg Leu Ser Cys Lys Ala Thr Gly Ile Pro Leu Pro Lys Leu  
 4265 4270 4275

Thr Trp Thr Phe Asn Asn Asn Ile Ile Pro Ala His Phe Asp Ser  
 4280 4285 4290

Val Asn Gly His Ser Glu Leu Val Ile Glu Arg Val Ser Lys Glu  
 4295 4300 4305

Asp Ser Gly Thr Tyr Val Cys Thr Ala Glu Asn Ser Val Gly Phe  
 4310 4315 4320

Val Lys Ala Ile Gly Phe Val Tyr Val Lys Glu Pro Pro Val Phe  
 4325 4330 4335

Lys Gly Asp Tyr Pro Ser Asn Trp Ile Glu Pro Leu Gly Gly Asn  
 4340 4345 4350

Ala Ile Leu Asn Cys Glu Val Lys Gly Asp Pro Thr Pro Thr Ile  
 4355 4360 4365

Gln Trp Asn Arg Lys Gly Val Asp Ile Glu Ile Ser His Arg Ile  
 4370 4375 4380

Arg Gln Leu Gly Asn Gly Ser Leu Ala Ile Tyr Gly Thr Val Asn  
 4385 4390 4395

Glu Asp Ala Gly Asp Tyr Thr Cys Val Ala Thr Asn Glu Ala Gly  
 4400 4405 4410

Val Val Glu Arg Ser Met Ser Leu Thr Leu Gln Ser Pro Pro Ile  
 4415 4420 4425

Ile Thr Leu Glu Pro Val Glu Thr Val Ile Asn Ala Gly Gly Lys  
 4430 4435 4440

Ile Ile Leu Asn Cys Gln Ala Thr Gly Glu Pro Gln Pro Thr Ile  
 4445 4450 4455

Thr Trp Ser Arg Gln Gly His Ser Ile Ser Trp Asp Asp Arg Val  
 4460 4465 4470

Asn Val Leu Ser Asn Asn Ser Leu Tyr Ile Ala Asp Ala Gln Lys  
 4475 4480 4485

Glu Asp Thr Ser Glu Phe Glu Cys Val Ala Arg Asn Leu Met Gly  
 4490 4495 4500

Ser Val Leu Val Arg Val Pro Val Ile Val Gln Val His Gly Gly  
 4505 4510 4515

Phe Ser Gln Trp Ser Ala Trp Arg Ala Cys Ser Val Thr Cys Gly  
 4520 4525 4530

Lys Gly Ile Gln Lys Arg Ser Arg Leu Cys Asn Gln Pro Leu Pro  
 4535 4540 4545

Ala Asn Gly Gly Lys Pro Cys Gln Gly Ser Asp Leu Glu Met Arg  
 4550 4555 4560

Asn Cys Gln Asn Lys Pro Cys Pro Val Asp Gly Ser Trp Ser Glu  
 4565 4570 4575

Trp Ser Leu Trp Glu Glu Cys Thr Arg Ser Cys Gly Arg Gly Asn  
 4580 4585 4590

Gln Thr Arg Thr Arg Thr Cys Asn Asn Pro Ser Val Gln His Gly  
 4595 4600 4605

Gly Arg Pro Cys Glu Gly Asn Ala Val Glu Ile Ile Met Cys Asn  
 4610 4615 4620

Ile Arg Pro Cys Pro Val His Gly Ala Trp Ser Ala Trp Gln Pro  
 4625 4630 4635

Trp Gly Thr Cys Ser Glu Ser Cys Gly Lys Gly Thr Gln Thr Arg  
 4640 4645 4650

Ala Arg Leu Cys Asn Asn Pro Pro Pro Ala Phe Gly Gly Ser Tyr  
 4655 4660 4665

Cys Asp Gly Ala Glu Thr Gln Met Gln Val Cys Asn Glu Arg Asn  
 4670 4675 4680

Cys Pro Ile His Gly Lys Trp Ala Thr Trp Ala Ser Trp Ser Ala  
 4685 4690 4695

Cys Ser Val Ser Cys Gly Gly Gly Ala Arg Gln Arg Thr Arg Gly  
 4700 4705 4710

Cys Ser Asp Pro Val Pro Gln Tyr Gly Gly Arg Lys Cys Glu Gly  
 4715 4720 4725

Ser Asp Val Gln Ser Asp Phe Cys Asn Ser Asp Pro Cys Pro Thr  
 4730 4735 4740

His Gly Asn Trp Ser Pro Trp Ser Gly Trp Gly Thr Cys Ser Arg  
 4745 4750 4755

Thr Cys Asn Gly Gly Gln Met Arg Arg Tyr Arg Thr Cys Asp Asn  
 4760 4765 4770

Pro Pro Pro Ser Asn Gly Gly Arg Ala Cys Gly Gly Pro Asp Ser  
 4775 4780 4785

Gln Ile Gln Arg Cys Asn Thr Asp Met Cys Pro Val Asp Gly Ser  
 4790 4795 4800

Trp Gly Ser Trp His Ser Trp Ser Gln Cys Ser Ala Ser Cys Gly  
 4805 4810 4815

Gly Gly Glu Lys Thr Arg Lys Arg Leu Cys Asp His Pro Val Pro  
 4820 4825 4830

Val Lys Gly Gly Arg Pro Cys Pro Gly Asp Thr Thr Gln Val Thr  
 4835 4840 4845

Arg Cys Asn Val Gln Ala Cys Pro Gly Gly Pro Gln Arg Ala Arg  
 4850 4855 4860

Gly Ser Val Ile Gly Asn Ile Asn Asp Val Glu Phe Gly Ile Ala  
 4865 4870 4875

Phe Leu Asn Ala Thr Ile Thr Asp Ser Pro Asn Ser Asp Thr Arg  
 4880 4885 4890

Ile Ile Arg Ala Lys Ile Thr Asn Val Pro Arg Ser Leu Gly Ser  
 4895 4900 4905

Ala Met Arg Lys Ile Val Ser Ile Leu Asn Pro Ile Tyr Trp Thr  
 4910 4915 4920

Thr Ala Lys Glu Ile Gly Glu Ala Val Asn Gly Phe Thr Leu Thr  
 4925 4930 4935

Asn Ala Val Phe Lys Arg Glu Thr Gln Val Glu Phe Ala Thr Gly  
 4940 4945 4950

Glu Ile Leu Gln Met Ser His Ile Ala Arg Gly Leu Asp Ser Asp  
 4955 4960 4965

Gly Ser Leu Leu Leu Asp Ile Val Val Ser Gly Tyr Val Leu Gln  
 4970 4975 4980

Leu Gln Ser Pro Ala Glu Val Thr Val Lys Asp Tyr Thr Glu Asp  
 4985 4990 4995

Tyr Ile Gln Thr Gly Pro Gly Gln Leu Tyr Ala Tyr Ser Thr Arg  
 5000 5005 5010

Leu Phe Thr Ile Asp Gly Ile Ser Ile Pro Tyr Thr Trp Asn His  
 5015 5020 5025

Thr Val Phe Tyr Asp Gln Ala Gln Gly Arg Met Pro Phe Leu Val  
 5030 5035 5040

Glu Thr Leu His Ala Ser Ser Val Glu Ser Asp Tyr Asn Gln Ile  
 5045 5050 5055

Glu Glu Thr Leu Gly Phe Lys Ile His Ala Ser Ile Ser Lys Gly  
 5060 5065 5070

Asp Arg Ser Asn Gln Cys Pro Ser Gly Phe Thr Leu Asp Ser Val  
 5075 5080 5085

Gly Pro Phe Cys Ala Asp Glu Asp Glu Cys Ala Ala Gly Asn Pro  
 5090 5095 5100

Cys Ser His Ser Cys His Asn Ala Met Gly Thr Tyr Tyr Cys Ser  
 5105 5110 5115

Cys Pro Lys Gly Leu Thr Ile Ala Ala Asp Gly Arg Thr Cys Gln  
 5120 5125 5130

Asp Ile Asp Glu Cys Ala Leu Gly Arg His Thr Cys His Ala Gly  
 5135 5140 5145

Gln Asp Cys Asp Asn Thr Ile Gly Ser Tyr Arg Cys Val Val Arg  
 5150 5155 5160 .

Cys Gly Ser Gly Phe Arg Arg Thr Ser Asp Gly Leu Ser Cys Gln  
 5165 5170 5175

Asp Ile Asn Glu Cys Gln Glu Ser Ser Pro Cys His Gln Arg Cys  
 5180 5185 5190

Phe Asn Ala Ile Gly Ser Phe His Cys Gly Cys Glu Pro Gly Tyr  
 5195 5200 5205

Gln Leu Lys Gly Arg Lys Cys Met Asp Val Asn Glu Cys Arg Gln  
 5210 5215 5220

- Asn Val Cys Arg Pro Asp Gln His Cys Lys Asn Thr Arg Gly Gly  
 5225 5230 5235

Tyr Lys Cys Ile Asp Leu Cys Pro Asn Gly Met Thr Lys Ala Glu  
 5240 5245 5250

Asn Gly Thr Cys Ile Asp Ile Asp Glu Cys Lys Asp Gly Thr His  
 5255 5260 5265

Gln Cys Arg Tyr Asn Gln Ile Cys Glu Asn Thr Arg Gly Ser Tyr  
 5270 5275 5280

Arg Cys Val Cys Pro Arg Gly Tyr Arg Ser Gln Gly Val Gly Arg  
 5285 5290 5295

Pro Cys Met Asp Ile Asn Glu Cys Glu Gln Val Pro Lys Pro Cys  
 5300 5305 5310

Ala His Gln Cys Ser Asn Thr Pro Gly Ser Phe Lys Cys Ile Cys  
 5315 5320 5325

Pro Pro Gly Gln His Leu Leu Gly Asp Gly Lys Ser Cys Ala Gly  
 5330 5335 5340

Leu Glu Arg Leu Pro Asn Tyr Gly Thr Gln Tyr Ser Ser Tyr Asn  
 5345 5350 5355

Leu Ala Arg Phe Ser Pro Val Arg Asn Asn Tyr Gln Pro Gln Gln  
 5360 5365 5370

His Tyr Arg Gln Tyr Ser His Leu Tyr Ser Ser Tyr Ser Glu Tyr  
 5375 5380 5385

Arg Asn Ser Arg Thr Ser Leu Ser Arg Thr Arg Arg Thr Ile Arg  
 5390 5395 5400

Lys Thr Cys Pro Glu Gly Ser Glu Ala Ser His Asp Thr Cys Val  
 5405 5410 5415

Asp Ile Asp Glu Cys Glu Asn Thr Asp Ala Cys Gln His Glu Cys  
 5420 5425 5430

Lys Asn Thr Phe Gly Ser Tyr Gln Cys Ile Cys Pro Pro Gly Tyr  
 5435 5440 5445

Gln Leu Thr His Asn Gly Lys Thr Cys Gln Asp Ile Asp Glu Cys  
 5450 5455 5460

Leu Glu Gln Asn Val His Cys Gly Pro Asn Arg Met Cys Phe Asn  
 5465 5470 5475

Met Arg Gly Ser Tyr Gln Cys Ile Asp Thr Pro Cys Pro Pro Asn  
 5480 5485 5490

Tyr Gln Arg Asp Pro Val Ser Gly Phe Cys Leu Lys Asn Cys Pro  
 5495 5500 5505

Pro Asn Asp Leu Glu Cys Ala Leu Ser Pro Tyr Ala Leu Glu Tyr  
 5510 5515 5520

Lys Leu Val Ser Leu Pro Phe Gly Ile Ala Thr Asn Gln Asp Leu  
 5525 5530 5535

Ile Arg Leu Val Ala Tyr Thr Gln Asp Gly Val Met His Pro Arg  
 5540 5545 5550

Thr Thr Phe Leu Met Val Asp Glu Glu Gln Thr Val Pro Phe Ala  
 5555 5560 5565

Leu Arg Asp Glu Asn Leu Lys Gly Val Val Tyr Thr Thr Arg Pro  
 5570 5575 5580

Leu Arg Glu Ala Glu Thr Tyr Arg Met Arg Val Arg Ala Ser Ser  
 5585 5590 5595

Tyr Ser Ala Asn Gly Thr Ile Glu Tyr Gln Thr Thr Phe Ile Val  
 5600 5605 5610

Tyr Ile Ala Val Ser Ala Tyr Pro Tyr  
 5615 5620

<210> 129

<211> 222

<212> PRT

<213> Homo sapiens

<400> 129

Met Leu Ser Arg Ala Val Cys Gly Thr Ser Arg Gln Leu Pro Pro Val  
 1 5 10 15

Leu Gly Tyr Leu Gly Ser Arg Gln Lys His Ser Leu Pro Asp Leu Pro  
 20 25 30

Tyr Asp Tyr Gly Ala Leu Glu Pro His Ile Asn Ala Gln Ile Met Gln  
 35 40 45

Leu His His Ser Lys His His Ala Ala Tyr Val Asn Asn Leu Asn Val  
 50 55 60

Thr Glu Glu Lys Tyr Gln Glu Ala Leu Ala Lys Gly Asp Val Thr Ala  
 65 70 75 80

Gln Ile Ala Leu Gln Pro Ala Leu Lys Phe Asn Gly Gly His Ile  
 85 90 95

Asn His Ser Ile Phe Trp Thr Asn Leu Ser Pro Asn Gly Gly Glu  
 100 105 110

Pro Lys Gly Glu Leu Leu Glu Ala Ile Lys Leu Asp Phe Gly Ser Phe  
 115 120 125

Asp Lys Phe Lys Glu Lys Leu Thr Ala Ala Ser Val Gly Val Gln Gly  
 130 135 140

Ser Gly Trp Gly Trp Leu Gly Phe Asn Lys Glu Arg Gly His Leu Gln  
 145 150 155 160

Ile Ala Ala Cys Pro Asn Gln Asp Pro Leu Gln Gly Thr Thr Gly Leu  
 165 170 175

Ile Pro Leu Leu Gly Ile Asp Val Trp Glu His Ala Tyr Tyr Leu Gln  
 180 185 190

Tyr Lys Asn Val Arg Pro Asp Tyr Leu Lys Ala Ile Trp Asn Val Ile  
 195 200 205

Asn Trp Glu Asn Val Thr Glu Arg Tyr Met Ala Cys Lys Lys  
 210 215 220

<210> 130

<211> 99

<212> PRT

<213> Homo sapiens

&lt;400&gt; 130

Met	Lys	Val	Ser	Ala	Ala	Leu	Leu	Cys	Leu	Leu	Leu	Ile	Ala	Ala	Thr
1				5				10						15	

Phe	Ile	Pro	Gln	Gly	Leu	Ala	Gln	Pro	Asp	Ala	Ile	Asn	Ala	Pro	Val
					20			25					30		

Thr	Cys	Cys	Tyr	Asn	Phe	Thr	Asn	Arg	Lys	Ile	Ser	Val	Gln	Arg	Leu
					35			40				45			

Ala	Ser	Tyr	Arg	Arg	Ile	Thr	Ser	Ser	Lys	Cys	Pro	Lys	Glu	Ala	Val
					50			55			60				

Ile	Phe	Lys	Thr	Ile	Val	Ala	Lys	Glu	Ile	Cys	Ala	Asp	Pro	Lys	Gln
					65			70			75		80		

Lys	Trp	Val	Gln	Asp	Ser	Met	Asp	His	Leu	Asp	Lys	Gln	Thr	Gln	Thr
					85			90			95				

Pro Lys Thr

&lt;210&gt; 131

&lt;211&gt; 355

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 131

Met	Ala	Lys	Leu	Ile	Ala	Leu	Thr	Leu	Leu	Gly	Met	Gly	Leu	Ala	Leu
1				5				10					15		

Phe	Arg	Asn	His	Gln	Ser	Ser	Tyr	Gln	Thr	Arg	Leu	Asn	Ala	Leu	Arg
					20			25			30				

Glu	Val	Gln	Pro	Val	Glu	Leu	Pro	Asn	Cys	Asn	Leu	Val	Lys	Gly	Ile
					35			40			45				

Glu	Thr	Gly	Ser	Glu	Asp	Leu	Glu	Ile	Leu	Pro	Asn	Gly	Leu	Ala	Phe
					50			55			60				

Ile	Ser	Ser	Gly	Leu	Lys	Tyr	Pro	Gly	Ile	Lys	Ser	Phe	Asn	Pro	Asn
					65			70			75		80		

Ser Pro Gly Lys Ile Leu Leu Met Asp Leu Asn Glu Glu Asp Pro Thr  
 85 90 95

Val Leu Glu Leu Gly Ile Thr Gly Ser Lys Phe Asp Val Ser Ser Phe  
 100 105 110

Asn Pro His Gly Ile Ser Thr Phe Thr Asp Glu Asp Asn Ala Met Tyr  
 115 120 125

Leu Leu Val Val Asn His Pro Asp Ala Lys Ser Thr Val Glu Leu Phe  
 130 135 140

Lys Phe Gln Glu Glu Lys Ser Leu Leu His Leu Lys Thr Ile Arg  
 145 150 155 160

His Lys Leu Leu Pro Asn Leu Asn Asp Ile Val Ala Val Gly Pro Glu  
 165 170 175

His Phe Tyr Gly Thr Asn Asp His Tyr Phe Leu Asp Pro Tyr Leu Gln  
 180 185 190

Ser Trp Glu Met Tyr Leu Gly Leu Ala Trp Ser Tyr Val Val Tyr Tyr  
 195 200 205

Ser Pro Ser Glu Val Arg Val Val Ala Glu Gly Phe Asp Phe Ala Asn  
 210 215 220

Gly Ile Asn Ile Ser Pro Asp Gly Lys Tyr Val Tyr Ile Ala Glu Leu  
 225 230 235 240

Leu Ala His Lys Ile His Val Tyr Glu Lys His Ala Asn Trp Thr Leu  
 245 250 255

Thr Pro Leu Lys Ser Leu Asp Phe Asn Thr Leu Val Asp Asn Ile Ser  
 260 265 270

Val Asp Pro Glu Thr Gly Asp Leu Trp Val Gly Cys His Pro Asn Gly  
 275 280 285

Met Lys Ile Phe Phe Tyr Asp Ser Glu Asn Pro Pro Ala Ser Glu Val  
 290 295 300

Leu Arg Ile Gln Asn Ile Leu Thr Glu Glu Pro Lys Val Thr Gln Val  
305 310 315 320

Tyr Ala Glu Asn Gly Thr Val Leu Gln Gly Ser Thr Val Ala Ser Val  
325 330 335

Tyr Lys Gly Lys Leu Leu Ile Gly Thr Val Phe His Lys Ala Leu Tyr  
340 345 350

Cys Glu Leu  
355